



Vol. III.]

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[No. 36.]

EXCLUSIVE LEGISLATION.

IN our last number we stated that the exertions made by the United Society on behalf of the trade, and by the Pharmaceutical Society on its own behalf, had failed to obtain an exemption from service upon Juries, the House of Commons having rejected both propositions. This being the case, we confess we were not prepared for the subsequent exclusive legislation of the House of Lords in their determination to force upon the House of Commons the amendment "That the exemption clause should be granted to the members of the Pharmaceutical Society only"—a decision that will hardly give satisfaction to the trade.

The grievance complained of was, that in a large number of cases, the Chemist and Druggist had no one to whom he could safely delegate the responsibility attached to the sale of poisons and the making up of prescriptions; and that his forced absence on Jury service seriously affected his business, and exposed the public to danger. The Lords have, however, given the exemption to those who least require it,—who being the more wealthy, as a class, can command the services of experienced assistants, and have their own time at their own disposal. If the educational advantages of the Pharmacutists have been really so great, they are just the individuals whose names ought to be retained on the Jury list.

At the fag-end of the Session, at a hurried morning sitting, amidst a considerable amount of impatience, it was hardly to be wondered that the House of Commons should desire to avoid a collision with the Upper House, who were (we believe, through a total misapprehension of the question) so determined to favour a class interest.

In another portion of our columns will be found a report of the debate at the passing of the Bill, and it will be observed from the speech of Sir George Cornewall Lewis, "that if the House granted this privilege to the Pharmaceutical Society, they must be prepared to extend it to a body of the trade immediately following them;" and from the speech of Sir George Grey, that "if the Pharmaceutical Chemists be exempted, there would still be stronger grounds for exempting the Chemists and Druggists in small country towns from serving upon Juries." These being the views of Government upon the question, it will afford the trade considerable encouragement in prosecuting their claim next Session. At present, the position is an absurdity, and the advantage is given to the Pharmaceutical Society, who neither supported, or in any way represented, the movement on behalf of the trade. We have all the greater pleasure in placing before our readers a fuller account of the debate than the morning papers afforded, as it contains the announcement that our city representative, Mr. Crawford, has identified himself with the proposition for further extension of the exemption. To this gentleman, and to his colleague, Mr. Western Wood, the best thanks of the trade are due.

We understand that the United Society are determined not to leave the question in its present shape, and we trust that their exertions at the next Session will be rewarded by the unanimous and hearty support of the trade.

We beg to direct the attention of our readers to an interesting letter in another part of our journal on this subject. We believe that this letter expresses the feeling of the majority in both sections of the trade to which the writer belongs.

MEDALS AND MUDDLES—THALLIUM.

THE scientific world was startled from its propriety on the appearance of the Jury Awards, at finding that the discoverer of the new metal, thallium, was left without reward, while a young French chemist, who had only discovered a source of it, long after Mr. Crookes had done the same thing, had received a medal. On the matter being investigated, it was discovered that the clerk who had copied the Jury Report had somehow or other omitted Mr. Crookes' name, who had been after all awarded a medal, as he deserved. The blunder will, of course, be corrected in the second edition of the Awards; but what apologies or corrections can atone to Mr. Crookes for the pain and annoyance he must have suffered? While on this subject, we must confess that we were greatly surprised at M. Lamy having received a medal at all. M. Lamy, no doubt, deserves a great deal of credit for having found the same source of thallium as Mr. Crookes, but as his specimen was not exhibited in the building until the beginning of July, we submit that he has no more right to a medal than the discoverer of the next new metal. M. Lamy says that he discovered thallium last spring, not knowing of Mr. Crookes' previous discovery. He must be very backward in the current scientific literature of the day, not to have heard of the discovery of a new element, various accounts of which have been published in every scientific journal in Europe during the last twelve months. We greatly fear that M. Lamy has some very strong and very weak friends at court. We hear that Mr. Crookes has found a source for thallium, by means of which he will shortly be able to produce the metal in pounds instead of grains.

CHEMISTRY AND PHARMACY AT THE INTERNATIONAL EXHIBITION.

By C. W. QUIN, F.C.S.,

SUPERINTENDENT OF CLASS II. (CHEMICAL AND PHARMACEUTICAL PRODUCTS).

PASSING onwards we come to the fine display of coal-tar products contributed by Messrs. George Millers and Co., of Glasgow. These interesting products were, we believe, prepared by Mr. C. Greville Williams, with whose valuable researches in this direction our readers are no doubt well acquainted. The most striking object in the case is the chinoline blue, that lovely but fugitive colour that made such a sensation at the balls and parties of the nobility last year and the year before. The base from which it is derived, and from which it receives its name, is also shown along with anthracene, pyridine, picoline, lutidine, lepidine, binitronaphthaline and several other naphthalic products, magenta crystals and picric acid. These are mostly displayed in a manner well deserving the attention of chemists. The substances are contained in glass bulbs terminating in a foot which fits into a brass stand, at the base of which are affixed the names of the substances shown. The Walker Alkali Company show some capital specimens of soda, sulphate of iron and hyposulphite of soda. Purposely missing the manures, we are greatly tempted to linger over the case of the Rev. W. Bowditch, and recount his ingenious and valuable process for purifying gas by means of lime, but time and space will not allow us so to do. Glancing, therefore, hurriedly at the magenta exhibited by Mr. Dawson, we pass across the main thoroughfare to the case of Dr.

Stenhouse. This case, in a scientific point of view, may be regarded as the gem of the whole Exhibition. It contains forty or fifty most rare and interesting substances, many of which have been discovered by this eminent chemist, all of which have been worked on by him with his well-known powers of research. The French chemists were frightened when they saw this magnificent display, and about three weeks after the opening of the Exhibition, there suddenly appeared in a corner of the case of M. Menier, in the French Chemical Department, a series of synthetical organic compounds, from the laboratory of M. Berthelot. It would take too long to enumerate the many interesting products contributed by Dr. Stenhouse; we must therefore be content with mentioning only a few of the more prominent. Perhaps the most striking of these are the products obtained from the mosses which yield cudbear, litmus, and orchil. These colouring matters do not exist ready formed in the lichens, but are generated by the chemical action of the materials employed in their manufacture. Thus the lichens from which orchil is obtained, contain, amongst other substances, a colourless neutral body called *orcin*, which under the influence of ammonia absorbs oxygen, and is converted into an azotized substance termed *orcein*, possessed of powerful tinctorial properties. Dissolved in potash or ammonia it yields the orchil of commerce. *Usnic acid* is obtained from a lichen belonging to the genus *Usnea*. Boiled with excess of alkali it yields *beta orcin*, a substance analogous in its properties to *orcin*. *Erythromannite* is a kind of sugar obtained from the *Roccella* by boiling the lichen in lime water, passing carbonic acid through the solution to remove the excess of lime and evaporating the syrupy mass to dryness. The *orcin* is removed by ether, and the erythromannite remaining is recrystallised. The crystals shown of this substance are magnificent, many of them being nearly an inch across and almost perfect in their crystalline form. *Evernic acid* is obtained from *Evernia*, another species of lichen. The specimens of *orcin* deserve particular examination, being most beautifully crystallised in long prismatic plates. The origin of *Purree*, or Indian yellow, has long been a puzzle to the chemist and merchant. It is pretty generally understood to be produced from the urine of cows, fed at certain times of the year in pastures producing yellow flowers possessed of strong tinctorial powers. The *purree* of commerce consists of *purreic* or *euxanthic acid* in combination with magnesia. Dissolved in hydrochloric or acetic acid, it yields crystals of *euxanthic acid* of a pale yellow colour. These, when heated in a tube to 212°, decompose and sublime—as *euxemthone*. The specimen of *myrozoocarpine*, or white Balsam of Peru, is peculiarly fine. The same may be said of the splendid crystals of the stearopten of the *Ptychotis ajowan*, or hydrate of thymy. A fine specimen of *nitro-theine* in splendid crystalline scales is also shown. This curious substance is produced from a solution of therein, by passing a current of chlorine through it. *Sparteine*, the third liquid alkaloid, nicotia and coma being the two others, is prepared from the *Spartium scoparium*, or butcher's broom. The platinum salt is very beautiful. *Larixin* is a peculiar substance lately discovered in the bark of the larch, by Dr. Stenhouse. It is remarkable for its lack of affinity for other substances, it being only with the greatest difficulty that it can be made to form compounds of any sort. A specimen of the resin of the *Xanthorrea* is interesting, from the fact of its yielding picric acid when treated with nitric acid. It would be impossible to describe the other remarkable and interesting compounds exhibited in this collection. It is seldom one sees so many rare substances proceeding from so famous a laboratory. They have been, we believe, mostly prepared by Mr. E. J. Mills, Dr. Stenhouse's talented assistant, and do infinite credit to this gentleman's manipulatory skill.

PHYTOLACCA DECANDRA.

SYNONYMS.—Pocan, Poke Weed, Common Poke or Scocke, Garget, Pigeon Berry.

This plant, from its size, large rich leaves, beautiful clusters of purple berries, often mingled upon the same branch with the green unripe fruit and flowers still in bloom, is one of the most striking of the North American Flora. Its generic name is said to be

derived from the French *lac*, lake; the colouring matter of the berries having some resemblance to that pigment.

BOTANY.—The root is large, and perennial, and possesses little or no odour, but a slightly sweetish taste, followed by some acidity. It should be collected annually, for medicinal purposes, in the month of November, cut into transverse slices, dried with a moderate heat, and preserved in boxes filled with dry sand. The stems are annual, and grow to the height of six or eight feet, dividing into numerous spreading branches. The young shoots are used as asparagus, but are apt to disorder the bowels. The leaves are entire, of a rich green colour, large, alternate, and possess much acidity. They should be gathered at midsummer when the foot-stalks begin to redden. The flowers, which are numerous and arranged in long racemes, are of a whitish colour, and commence blossoming about the month of July. The fruit is a shining berry of a dark purple, almost black, colour arranged in long clusters, and filled with a crimson juice. They have a sweetish, nauseous, somewhat acid taste, and a peculiar though faint odour. They ripen in the autumn, and are to be gathered when perfectly ripe. It is extensively found in all parts of the States of North America, growing in rich soil, in newly cleared and uncultivated fields, along fences, and by the borders of woods, &c.; it is also met with in the North of Africa, and South of Europe, where it is supposed to have been introduced from America. It belongs to the Natural Order *Phytolaccaceæ*, The *Phytolacca* Order. The whole plant possesses an unpleasant odour.

CHEMISTRY.—The ashes of the plant contain a very large per-centage of potash, which exist in combination with a peculiar acid resembling the Malic. The colouring principle of the juice is evanescent, and cannot be applied to useful purposes in dyeing, from the difficulty of fixing it. Griffiths, after many hundred experiments, found the juice of the crab apple to be the best mordant, but even when this is employed, it changes to a dirty brownish red. The root imparts its active principles to water and alcohol. A concentrated preparation termed *Phytolaccin*, is obtained from it by Messrs. Tilden and Sons, of New York.

MEDICINAL PROPERTIES.—The active principles reside in the leaves, berries, and roots: the two latter are included in the Pharmacopœia; the root is most active. It belongs to the class of acro-narcotics, and is alterative, cathartic, diuretic, diaphoretic, emetic, and narcotic, according to the dose and mode of administration. As an emetic, it is said to be very slow in its action, often not causing emesis till one or two hours after it has been taken, and it then continues to act for some time upon the stomach and bowels. In an over-dose it causes very severe vomiting and purging, attended with drowsiness, vertigo, dimness of vision, great prostration, and in some cases convulsions. It is used in chronic and syphilitic rheumatism, and for allaying syphilitic pains, in which it is said to prove very successful. It is stated to cure syphilis in all its stages, without the use of mercury, and is employed as an alterative in scrofula and scrofulous diseases; its action on the bowels renders it extremely objectionable as an emetic. Dr. Lee* writes as follows: "It can only be used with safety as an alterative; and there is no doubt whatever, that it is among the most efficient of our indigenous articles." The extract has been long employed in popular practice in the treatment of indolent ulcers, and as a dressing to ulcers. Dr. Shultz states that "he found an extract of the root highly useful in the cure of scabies and herpes, and that it is more beneficial than opium in allaying pain in syphilitic rheumatism." The extract as well as the tincture has been a good deal employed in scrofulous affections, and with very beneficial results. It has also been used by the "Eclectics" in rheumatism, &c., and externally to glandular tumours, bronchocele, cancerous sores, &c.

PREPARATIONS AND DOSES.

Dr. Lee states, "As an alterative in syphilitic rheumatism, and for allaying syphilitic pains, as well as in scrofulous affections, we have found the fluid extract the most valuable of all the preparations, in doses of from grs. x. to grs. xxx. The solid extract carefully prepared from the inspissated juice of the berries, or a hydro-alcoholic tincture of the root, is also a valuable preparation, in doses of from gr. j. to grs. iv. The Phyto-

* Tilden's *Journ. Mat. Med.* vol. iii, p. 322.

laccin of Tilden and Co., which seems to be the chief active principle, is now successfully used as an alterative tonic, in doses of from gr. $\frac{1}{2}$ to gr. j. A saturated tincture of the berries or the root, prepared with diluted alcohol, is preferred by some practitioners, in rheumatic cases, in doses of from gtts. xx. to gtts. xl., three times a day. A strong infusion of the leaves or root has been recommended in piles. An ointment prepared with \mathfrak{zj} . of the powdered root or leaves, and \mathfrak{zj} . of lard, has been used with advantage in psora, tinea capitis, and some other forms of cutaneous disease. An extract made by evaporating the expressed juice of the leaves has been used for the same purposes, and acquired at one time considerable repute as a remedy for cancer."

PERFUMERY AT THE INTERNATIONAL EXHIBITION.

ON the other side of the block containing the stands of Messrs. Piesse and Lubin and Perks, is a gorgeous display of soaps in all the colours of the rainbow, by Messrs. Yardley and Statham, contained in an exceedingly handsome case, delicately decorated with white, violet, and gold. Perfumers appear to have brought the process of colouring soaps quite under their control, the samples exhibited by this and other firms including many colours that have been, up to the present time, quite unattainable. Mr. Thompson exhibits soaps in great variety of tint, as well as the scent mella rose, for which his house is famous. The other specialties contributed by Mr. Thompson are Kalydor, rose, and mella rose soaps. Immediately opposite is the fountain of Messrs. Gosnell and Co., which all day long plays "Jockey Club," over the handkerchiefs of hot and dusty visitors. This fountain, which is from the art manufactory of Messrs. Minton, is a model of good taste and perfect execution. The design is classic, the details being blue and white, relieved slightly with touches of dead gold. The case of Messrs. Gosnell, close by, contains a host of scents, soaps, and toilet requisites, many of them put up in the most elegant manner. At the end of the block facing the main thoroughfare is the collection of transparent soaps, exhibited by Messrs. Pears, of Great Russell-street. This house has long been famous for its transparent soap, but owing to the heavy duty on spirits of wine in this country, the struggle between Messrs. Pears and their foreign competitors has at all times been most difficult to sustain. The commoner kinds of so called transparent soap, Messrs. Pears do not exhibit or manufacture, being undersold by foreign makers at their own doors. Their exhibition contains soap, three, five, ten, twenty, and even thirty-five years old, apparently as transparent as the day it was made, and at the top of the glass *épergnes*, in which the soap is tastefully arranged, are three balls so transparent, that it is hard to believe that they are really soap, and not amber-coloured glass. On the other side of the block is the stand of Mr. Rimmel, which to our mind bears off the palm of merit as the handsomest in the building. It is made entirely of ebony, picked out sparingly with gold. It contains three divisions, the centre being devoted to a scent fountain, contained in a recess draped with crimson velvet, and the two outer ones to fancy soaps on one side, and scents on the other. The scent fountain, which is from the designs of M. Poitevin, the celebrated modeller, of Paris, is quite a work of art in its way. It consists of a group of scent-making Cupids, one of whom feeds a fiery furnace beneath the still, while others bring flowers for its replenishment. The scent flows from a receiver, modelled to represent the head of an Indian, and is caught in a shell by an attendant Cupid. The scent used is the new perfume, "violet water," lately introduced by Mr. Rimmel. Since the opening of the Exhibition, this now famous scent has been distributed to the public in sufficient quantities to make a small swimming bath, such is the estimation in which it is held. On the left hand side of the fountain is a fine show of coloured soap. Mr. Rimmel has applied the new coal tar dyes to the colouring of fancy soap with great success, and the specimens of green, mauve, magenta, and scarlet soaps, are additional instances of the taste for colour that is growing up in the public mind. Some capital imitations of fruit in soap, complete this part of the display. On the other side of the fountain are exhibited the numerous scents made at Mr. Rimmel's establishment, as well as glycerin

paste, bandoline, and the thousand and one toilet necessities for which he is celebrated. We must not omit to mention the scent fruit-trees and artificial flowers, perfumed with their natural odours, which were so much in fashion at Christmas parties last year. Mr. Rimmel also exhibits his vaporizer, which is now too well known and appreciated by the general public to need notice here. Messrs. Atkinson's case is in the form of an octagon, and is built of walnut wood, most tastefully decorated with beautifully painted wreaths and garlands of flowers. In the upper part of the case are contained the scents, and beneath, the raw materials from which they are produced, together with a variety of sachet powders.

Next to them is the case of Messrs. Bayley and Co., filled with specimens of scents and fancy soaps, amongst which we find the famous "Ess Bouquet," for which Messrs. Bayley have long had a world wide reputation. Whittaker and Grossmiths send specimens of the "cent fleur perfume," both as scent and combined with pomatum and fancy soap. They also contribute many varieties of other scented soaps. Messrs. Warwick Brothers send an interesting collection of essences and essential oils from flowers, grown on the farms at Nice. They also exhibit interesting specimens of the raw materials from which their perfumes are drawn.

Messrs. Ede and Co., the Court perfumers, exhibit a great variety of scents in a plain handsome case. Amongst them we may notice specially the new scents, "Hedvonia," and "Kiss me quietly," which they slyly announce on their label as being "truly refreshing." Having often tested it both "quietly" and otherwise, we can fully bear out their laudatory remarks. The bottles in which their scents are contained deserve particular notice, being very artistically executed. Mr. J. T. Saunders sends English lavender water, and several specimens of medicated soaps, very interesting to the pharmacist. They include *Sapones Creosoti*, *Hydrarg. cum plumbo*, *Camphoræ Co.*, *Sulphuris Co.*, and several others.

The old established house of Delcroix and Son exhibit a series of articles, whose names are identified with their house in a plain business-like looking case. Amongst them may be mentioned Milk of Roses, Mecca soap, and Esprit de Millefleurs, which were to be found on the toilet tables of our grandmothers and great grandmothers, and which have stood their ground successfully with their modern competitors. Madame Moreau sends numerous specimens of cosmetics, such as *blanc de riz*, *blanc de perle*, *rouge vegetal*, and other efficient and harmless preparations for improving the fading complexion. Madame Moreau exhibits an ingenious little book in the form of an ordinary note-book, which contains a looking-glass, a pencil for darkening the eyebrows or hair, and a quantity of vegetable rouge spread on the inner covers of the book, which may be easily removed and transferred to the cheeks with a wet finger. Madame Moreau also exhibits a testimonial from Ristori, mentioning her theatrical cosmetics in terms of high praise. Messrs. Condé and Bonus both exhibit good specimens of essential oils, natural and artificial. Mr. Keith sends lavender water, and British Eau de Cologne. Mr. Wharry, of Chippenham, contributes several specimens of oil of lavender and lavender water, the produce of his famous lavender farms in Wiltshire. Close to him, Mr. Rimmel exhibits a collection of scents and raw materials carefully classified according to their source. Thus we have the Floral, Jasmin, Violet, Herbal, Spice, Root, Fruit, and Artificial series. There are also interesting specimens of Turkish, Tunisian and Chinese perfumery, and a collection of effleurage frames and other utensils and implements used in perfumery. It is Mr. Rimmel's intention to present his collection, which contains many unique specimens, to the South Kensington Museum, at the close of the Exhibition. Many visitors to the Exhibition have expressed their surprise that neither Messrs. Piesse and Lubin nor Mr. Rimmel have obtained medals for their productions; but the matter is easily explained, by the fact that the reputation of these gentlemen, both as scientific chemists and practical perfumers, procured their election as Jurors by the exhibitors of Class 4 D, and that, in consequence, they could not receive a reward of any kind. With respect to the Jury of Class 4 D, it may be mentioned, that it at first consisted only of Dr. Odling, and Messrs. Piesse and Rimmel; but those gentlemen considering that there was an unfair preponderance of British interest amongst their body, procured the addition to their number, of Professor Heuzé, for France, and Dr. Simon for the Zollverein,

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THE NATURAL ORDERS OF PLANTS.

CONVOLVULACEÆ.—THE CONVULVULUS, OR BINDWEED ORDER.

THIS order is composed of herbaceous plants and shrubs, which are generally twining, and frequently contain a milky juice. They abound in all parts of the tropics, especially in the plains and valleys; few only are met with in temperate climates, and in the coldest latitudes they are altogether absent. The order belongs to the class Exogens, sub-class Corollifloræ, and contains forty-seven genera, and above six hundred and sixty-five species.

BOTANY.—The stems are generally twining or trailing, sometimes erect, smooth, or with a simple pubescence (the surface covered with short, soft, close hairs). The leaves are alternate, undivided or lobed, and exstipulate (destitute of the little leafy appendages, termed stipules, at their base). Inflorescence (the manner in which the flower-buds are arranged on the axis) axillary or terminal, and the peduncles (flower-stalks) one, or many flowered. The Calyx (outer floral covering) is persistent (does not fall off), with five deep divisions, much imbricated (overlapping, like the tiles of a house). The corolla (inner floral covering) is monopetalous (the petals more or less united together), regular (the petals being of equal size, or united in equal degrees), five partite or plaited, without scales in its tube, and deciduous (falls off). *Æstivation* plaited (the petals, before expansion, folded together, lengthwise, like the plaits of a closed fan). Stamens (male organs) five, alternate with the lobes of the corolla. The ovary (that part of the female organ which contains the ovules or rudimentary seeds) is two, three, or four celled, or the carpels (rolled up leaves of which the pistil is composed) are more or less distinct. The ovules are from one to two in each cell or carpel, erect. Fruit capsular, from one to four celled, with septifragal dehiscence. Embryo curved or coiled in a small quantity of mucilaginous albumen, with foliaceous crumpled cotyledons.

DISTINCTION FROM OTHER ORDERS.

From *Cordiace* (The Cordia, or Sebesten Order), by its plaited corolla and capsular fruit, with septifragal dehiscence and the presence of albumen. From *Nolanaceæ*, the Nolana Order, by the structure of its pistil and fruit, and its generally twining habit. From *Polemoniaceæ* (The Phlox Order), by its plaited corolla, the structure of its fruit and its curved or spiral embryo. From *Hydrophyllaceæ* (The Hydrophyllum Order), by the structure of its fruit, and generally twining habits. From *Solanaceæ* (The Solanum or Potato Order), by its plaited corolla. From *Cuscutaceæ* (The Dodder Order), by the absence of scale-like bodies at the base of the stamens and by its curved and spiral embryo. (The Didders have a thread-shaped embryo.)

GENERAL PROPERTIES.—The roots abound in an acrid milky juice, which is strongly purgative. Its purgative effects are due to a peculiar resin, as in Scammony and Jalap. In some species, however, this principle is either absent altogether, or present in very small quantity, and its place supplied with starch or sugar, so that they become edible. The seeds of some species are purgative, and the leaves of others, emollient. A few contribute to the adornment of our gardens.

PRINCIPAL PLANTS AND USES.

ARGYREIRA.—A decoction of the leaves of the species *Bracteata*, is used by the natives of India as a fomentation in cases of scrofulous enlargements of the joints, the boiled leaves being employed as a poultice at the same time.

BATATAS.—The root of the species *Edulis* constitutes the Sweet Potato, which is largely used as food in many tropical countries. The large tuberous root of the species *Paniculata*, a native of the East Indies and New Holland, is cathartic, and is said to be used as such by the inhabitants of those countries.

CALYSTEGIA.—The roots of the species *Septium*, and *Soldanella*, indigenous plants, possess purgative properties. The former grows in moist woods and hedges, which it greatly adorns with its large pure white blossoms. The latter flourishes on sandy banks on the sea-shore, and has large purplish flowers, which soon fall off after exposure to the meridian sun.

CONVOLVULUS.—The species *Althæoides* is a beautiful Mediterranean plant, having purgative roots, which may be used as a substitute for Jalap. The species *Arcensis*, small Bindweed, is an indigenous perennial, common in our corn-fields and hedges; its root possesses purgative properties. The whole herb of the species *Cantabrica*, is said to be vermifuge. The species *Dissectus* abounds in prussic acid, and is said to be one of the plants employed in making the liqueur Noyeau. The roots of the species *Macropus*, a native of South America, are purgative. The valuable gum resin Scammony is obtained from the incised fresh root of the species *Scammonia*. It is a perennial, and a native of Asia Minor, Greece, the Levant, and Syria. The greater part of that imported into this country comes from Smyrna. According to Dr. Ushar, of Oaxaca, the poison called in Mexico "Guaco," is a Convolvulus.

EXOGENIUM.—The tuberculated roots of the species *Purga*, a beautiful twining plant, with long crimson flowers, and a native of Mexico, yields the true Jalap of the Materia Medica, so well known as a purgative.

IPOMÆA.—The roots of the species *Macrorrhiza*, a plant inhabiting the sandy soil of Georgia and Carolina, contain little or no resin, but, like those of the Sweet Potato, contain much saccharine and farinaceous matter, and are used as food by the inhabitants. The foliage of the species *Maritima*, is stated by Lindley to be employed by the Brazilians in cases of enlargements of the joints. The species *Operculata*, yields a purgative drug, imported into Europe under the name of Gomma da Batata. The roots of the species *Orizabensis*, possess similar properties to those of the true Jalap, and are sometimes intermixed with them. They are termed *Woody Jalap*, or *Jalap Wood*, in this country; *Light or Fusiform Jalap* on the Continent, and *Male Jalap* in Mexico. The roots of the species *Pandurata*, a native of North America, are employed in the States as Jalap; it resembles rhubarb in its operation, and is supposed to be also diuretic. The roots of the species *Quamoclit*, a native of the East Indies, are said to be employed as a sternutatory. The species *Sensitiva* is remarkable for the irritability of its corolla. The species *Tuberosa*, a native of Jamaica, is the Spanish Arbour Vine, the roots of which yield a drastic substance resembling Scammony. The roots of the species *Turpethum*,—Turbeth, Turbith, Turpethum—are similar to Jalap, but rougher in operation; they were formerly much used as a purgative. It is a native of the East Indies, &c.

PHARBITIS.—The seeds of the species *Nil*, are sold in India under the name of *Kala dana*, *Hubul nil*, and *Mirchai*. According to Roxburgh, they are roasted like coffee, powdered and given in some convenient vehicle.

RHODORHIZA.—A volatile oil having a bitter balsamic flavour, and called oil of Rhodium, is obtained by distillation from the species of this genus, and the powdered wood is employed as a snuff, and for the purposes of fumigation.

THE TRADE IN LIQUORICE.

By P. L. SIMMONDS, F.S.S.

(Continued from our last. Page 193.)

THE roots are usually taken up with a three-pronged fork, and stacked in trenches until wanted. The stacking is effected in a moderately dry and sheltered place, the roots being placed upright, with layers of earth between them and a layer of several inches thick on the top. In this manner the stock is preserved in good order for several months. They are taken out when wanted, by hundredweights, and before being sent to London are deprived of their crowns by chopping. The fibres and small branches which are removed in trimming are called *offal*, and were formerly dried and ground to powder, and much used by chemists for rolling pills, in order to give consistency and substance to the compound.

This well-known vegetable product was equally familiar to the ancients, who also used

it medicinally. Under the name of Pontefract Cakes, small liquorice lozenges, stamped with the arms of the town from whence they take their name, are still sold by chemists and druggists.

The foreign root is sometimes imported from San Sebastian and the Papal Territories into London and Liverpool in small bundles of 60 to 70lbs. each, for the use of druggists. It is grown and manufactured to a considerable extent in the provinces of Seville, Valencia, and Catalonia, in Spain. The liquorice-root grows wild in many parts of Greece, and especially in the province of Achaia, at Corinth, Phthiotes, and Missolonghi, in great abundance; its quality is considered very good, and has induced many to undertake its manufacture. But the number is now much reduced, owing to the cultivation of the land, which makes the root scarce. One manufacturer at Patras, Mr. George Congos, used to prepare yearly more than 40,000 oques of liquorice-juice. The Greek root is said to be sweeter than that found in Sicily and Spain, hence the juice contains a greater quantity of saccharine matter than that made in Calabria.

The following figures from the Official Trade Returns, show the sources of supply in 1860. The duty, which had been 18s. per cwt. on Paste from British Possessions, and £1 on foreign make, from 1846, and £1 per cwt. on all kinds of Juice from August 26, 1853, was abolished on March 7, 1860:—

LIQUORICE PASTE.			LIQUORICE JUICE.		
	Quantity. Cwt.	Computed Value.		Quantity. Cwt.	Computed Value.
France.....	757	£2,479	France.....	772	£2,704
Spain	981	3,372	Spain	101	383
Naples and Sicily...	5,707	19,780	Sardinia	34	202
Turkey	16,790	33,578	Tuscany	97	572
Other parts.....	829	2,785	Two Sicilies	5,663	32,807
	25,064	61,994	Other parts	186	792
				6,853	37,460

In France there is an extensive use of liquorice-water in the promenades and public places, under the name of "Coco." Under the name of "Erqooss" it is also sold extensively as a drink in the streets of Turkey and Egypt, in the manner of sherbet. Liquorice is slightly laxative and cooling, anti-scorbutic, and, unlike other sugars, quenches thirst. The saccharine, or extract of liquorice, is of a very delicate character, and easily destroyed by burning or oxidation on boiling. Recently, under a patented process, the application of the vacuum pan, as in sugar-boiling, has been attended with great advantage. The result is a much better article than that made by the rough processes in use in Spain and Italy.

The price of liquorice is very little guide to quality; some foreign brands, and some forgeries of the same, selling at 120s. to 150s., and even 170s., when perfectly pure extract of the root can be had for 50s., and sticks superior to any others at 100s. Purchasers, to avoid being misled, should examine and satisfy themselves of the actual quality. A rough test, but practically sufficient for all purposes, is that of dissolving and filtering the solution to observe what deposit or sediment remains. The pure extract of liquorice of the shops, sold under the name of refined liquorice, is prepared by dissolving it in water, straining and inspissating in the usual manner.

Caution is required on the part of the grocer, that he does not pay £8 per cwt. for an article of less intrinsic value, and containing less glycyrrhizin, or pure extract of the root, than can be obtained for 100s.

A new feature in the trade is the introduction of small sticks, weighing from one to one and a half ounce, sold retail at one penny and one halfpenny per stick, instead of those of larger weight (two and three ounces) sold at sixpence per stick.

THE PATENT PLUMBAGO CRUCIBLE COMPANY have been awarded a Prize Medal for the excellence of their "Plumbago Lustre" and other Black Leads, exhibited in Class 2. The Company are the largest importers in the Kingdom of these articles, and their prices will be found in another portion of this Journal.—(ADVT.)

PRODUCTION OF CORK.*

IN the "Mémoires de la Société de Physique" of Geneva, is an interesting paper by M. Casimir de Candolle on the growth of cork. Although this useful substance exists in varying quantity in the bark of all phanerogamous plants and in several cryptogamous, yet for commercial purposes it is wholly procured from two species of oak, *Quercus occidentalis*, growing in the south-west of France and in Portugal, and from *Quercus Suber* (the cork-tree), growing in the south-east of France, in Italy, in Algeria, and in the isles of the Mediterranean. The acorns of the former species take two years to ripen. In 1859 M. C. de Candolle, while staying in Algeria, studied the development of the bark of the latter species. It is composed of four layers—the epidermis, the corky envelope, the cellular envelope, and the liber which covers the soft wood. These four parts increase independently of each other year by year. In the third or fourth year the epidermis, having attained the limits of its elasticity, splits longitudinally, and a marked change takes place in the corky envelope, which gradually takes up the appearance of true cork: new layers are produced, and the transformation of cellulose into cork steadily goes on. The cork thus naturally developed has no commercial value. It is termed "male;" and the first act (*démasclage*) of the cultivator is to separate it from the trunk, which thus leaves exposed the liber, termed "mother." The tree is then left to itself, and the cork begins to grow again, whilst the sap is flowing in consequence of the exposure of the liber. If a trunk left in this state for several months be cut down, in the section a ring of cork will be found formed in the interior of the "mother," at a variable distance from the surface of the trunk. All the exterior portion of the "mother" is dead, and splits as the tree grows, and the interior portion (new cork, termed "female") is developed. This "female" cork grows in the same manner as the "male," that is, by the addition of annual layers on the internal surface; but it is much finer and more elastic, and is the cork of commerce. These various stages of growth are exhibited in a series of beautiful plates. In the course of his researches M. de Candolle was led to observe the importance of the desiccation of the "mother," and to infer that, in proportion as this desiccation could be hastened, so much sooner would fresh layers of cork be produced. This idea he found to be correct. He observed several trees in which fires, after having charred the male or female cork, had determined the formation of a layer of female cork in the interior of the "mother." He states that he has seen a specimen, composed of three layers of "female" cork, separated by little zones from the "mother;" the fourth layer, which enveloped the whole, having disappeared in consequence of the fire. The thickness of these zones, increased by the application of boiling water, does not diminish by cooling. Other peculiarities of this remarkable substance are noted in the memoir.



Parliamentary Intelligence.—The Juries Bill.—On the question that the Lords' amendment to this bill be agreed to,

Mr. Craufurd said this amendment had been twice rejected by the house. He objected to any exemption being given to pharmaceutical chemists from serving on juries, and therefore he should move that the house do disagree to the amendment. (Cries of "divide.")

Mr. Crawford (London) thought the house ought not only to agree to the amendment, but to include in the exemption the United Society of Chemists and Druggists, and if the forms permitted he should have proposed a motion to that effect.

Sir De L. Evans would remind the house that the amendment was proposed by Lord Wensleydale, a great authority in such a case, and he should support it.

* Illustrated London News.

Sir G. C. Lewis did not think the house ought to exempt these gentlemen from serving on juries. Physicians and surgeons were exempted because their individual skill was often required in cases of great emergency. But the same reasons did not apply to pharmaceutical chemists, though if the house granted this privilege they must be prepared to extend it to a body immediately behind the Pharmaceutical Society.

Mr. Barrow had heard no reason against the exemption, and in the interest of the poorer classes of persons in country places he should support the amendment.

Sir G. Grey thought no good reason had been shown for the exemption proposed, but if the pharmaceutical chemists should be exempted, there would be still stronger grounds for exempting the chemists and druggists in small country towns from serving on juries. ("Divide, divide.")

Mr. Sclater-Booth said that as he had been left in charge of the bill, he should ask the house to support the amendment.

The house divided :

For the amendment	-	-	-	-	-	-	-	45
Against it	-	-	-	-	-	-	-	12

Majority in favour of the Lords' amendment - 33

(Loud cries of "Hear, hear," and cheers.)

[The House evidently imagined that this exemption was not merely a compromise, but an instalment of the relief claimed by the whole trade; hence the large majority, encouraging further agitation.—Ed. C. & D.]

The Petroleum Bill.—This bill was read a third time, and passed on Wednesday, July 2. When in committee, on Tuesday, July 15, Lord Kingsdown moved an amendment to alter the definition of articles dealt with by the measure, so that it should stand "any mineral product" giving off an inflammable vapour at 100 degrees Fahrenheit. The amendment was agreed to, and the bill passed through committee. An alteration has also been made in the regulations to be observed in storing petroleum: the quantity allowed to be kept is increased from 25 gallons to 40 gallons; and the distance diminished from "100 to 50 yards of a dwelling-house or a building in which goods are stored."

Standards of Weights and Measures.—In the House of Commons, on July 15, Mr. Locke asked the Secretary of State for the Home Department whether any communication had been received from the Astronomer Royal and the Comptroller-General of the Exchequer as to the inaccurate state of the standards of weight and measure; and whether those now in use at the Exchequer for testing the accuracy of the standards used by inspectors of weights and measures in all parts of the United Kingdom of Great Britain and Ireland have been so used since the year 1825; and if so, whether the same had been adjusted and re-verified, or whether any other means had been adopted for ascertaining their accuracy; and if so, what means. Sir G. Grey said, from the information which he had received on the subject, he understood that no representations on the subject had been made since 1859, when they were laid before Parliament. In regard to the dates upon which the standards of weights and measures were first used, it appeared that the balances and standard of avoirdupois weight had been used since 1825, and the standard of measures had only been in use since 1854.

Police.—Rival Quacks.—Mr. Arthur Peede, of 45, Liquorpond-street, Gray's Inn-lane, an advertising professor of doctoring, appeared before Mr. Barker, at the Clerkenwell Police Court, to answer to a summons charging him with assaulting and beating William Newman, a bill-sticker in the employ of Mr. W. Carpenter, of the Borough. The complainant, who appeared with a piece of adhesive plaster on his face, said he was employed by Mr. Carpenter to stick bills. Mr. Mould (chief clerk)—"Who is Mr. Carpenter?" Complainant—"A chemist." Complainant continued, that he posted his bills, and that the gentleman (the defendant) was in the same way as his master. The defendant was in opposition to his employer. Early in the morning of the 30th ult. he was putting some bills over Mr. Peede's, when the defendant, with a gentleman, impeded him, and the bills he had posted were instantly torn down by the defendant. Complainant said, "Hallo there! you're at it again," and defendant said, "Yes, I am." His instructions were to cover the bills of Mr. Peede. Defendant asked some one for a penknife, and complainant was almost immediately afterwards stabbed in the face, and went to the Hunter-street police-station. By Mr. Wakeling—Complainant did nothing to Mr. Peede. He did not strike him. He did use an offensive name to him when he tore down his bills, and said he would put the paste-brush in his eye. The instrument that wounded him he believed was a toothpick; it struck him in the cheek, and blood flowed. He was confident that the defendant struck him with the instrument purposely, and he did not push defendant's elbow to cause the wound. Police-constable E 146 did not see the assault, but he was called to take the defendant into custody. There were

witnesses present who stated that the complainant struck several times at the defendant. The complainant was not bleeding profusely; there was a speck on the face as though pricked with a pin. Mr. Wakeling addressed the Court, and was about to show that there really was no assault, when Mr. Barker said if there was an assault it was of a very slight character, and might have been caused by the expressions used against the defendant. The summons was dismissed.

Poisonings.—*By Cantharides.*—At the Surrey Sessions, on the 6th instant, Joseph Gondono, a lad, aged thirteen, whose connexions are highly respectable, surrendered to take his trial for unlawfully causing to be administered to Ruth Glynn, a certain drug, called cantharides, so as thereby to cause her grievous bodily harm. The prosecutrix, who appeared to be very unwell, said she was thirteen years of age. On the 10th ult. she went to Richmond with a school, to have a feast. The defendant was there with other boys, and they mixed together in the course of the day. A lad named Chapman came up to her and gave her a tart, saying that it was sent by Gondono. She ate it, and a little while afterwards defendant came up to her and asked her how she felt. She told him that she was not well, when he made use of improper conversation towards her, threw her on the ground, and took liberties with her. Afterwards, in the presence of her sister, he said he knew what was the matter with her; and on her sister asking him, he pulled out a paper and showed them some flies, which he said he had put in the tart while they were at tea. Edward Chapman, sixteen, said that he was with Gondono on the day in question, and he gave him two tarts to give to the prosecutrix and her sister. He did not know there was anything of a hurtful nature in them. On the way home in the train Ruth Glynn was so bad that she had to be held down, to prevent her jumping out of the window. George Russell, a lad, about thirteen, said that Gondono gave him twopence when at Richmond, and told him to go to a chemist's and buy some Spanish flies. Witness did so, and gave them to him. Witness also bought four tarts, and gave two to the prisoner. Edward Moore, another lad, said he heard the defendant say on Sunday that he should put Spanish flies in some cakes for the girls. Mr. Morton, a chemist, of Richmond, said he recollected selling some Spanish flies to Russell. He only gave him three, and had no idea that he was going to put them in anything. Mr. Thomson, for the defence, made an energetic appeal to the jury, but they returned a verdict of Guilty. The Deputy-Chairman postponed passing sentence, to ascertain the result of the girl's illness. The prisoner was bailed out by his friends.

By "Battle's Vermin Killer."—At the Lincoln Assizes, on the 28th ult., Elizabeth Vamplew, aged thirteen, a nursemaid, was charged with the wilful murder of the infant daughter of a respectable farmer and his wife, living at Alvingham. It was proved that the girl had purchased a threepenny packet of the poison, at a grocer's shop in Grimbleby. Battle's Vermin Killer, which is sold so openly, is a powder consisting of flour, coloured with Prussian blue, and containing about three-quarters of a grain of strychnine in the threepenny packet. The unfortunate girl was found guilty of manslaughter.

By Arsenic.—On Tuesday, the 8th ult., Mr. W. P. Cowley, a farmer at Ashby, St. Ledgers, near Rugby, sent his brother to the neighbouring town of Daventry, to purchase the materials for "sheep-dipping," consisting of six pounds of white arsenic, and thirty pounds of soft soap. On the following morning Mr. Cowley and his mother prepared the sheep-dipping mixture in which some lambs were washed, Mr. Cowley and several labourers being employed in the operation. After assisting her son in the preparation of the arsenical mixture, Mrs. Cowley proceeded to make a batter pudding for the dinner of her family and servants. By some means not yet ascertained, some of the arsenic must have become mixed with the pudding, for the whole of the persons, ten in number, who partook of it, became violently sick immediately after dinner, and exhibited all the symptoms of being poisoned. Medical assistance was procured, but one man, Richard Smith, died.

On Whit Tuesday, a number of members of the Burley Volunteer Corps partook of bread and cheese at Skipton, and shortly afterwards were seized with violent pains and symptoms of poisoning. The greater number rallied speedily, but four of the cases assumed a rather serious character. A portion of the cheese, which is said to have been American, was submitted to Mr. Rimmington, of Bradford, who found it contaminated with arsenic, and this contamination is thought to have occurred in the manufacture.

[An extraordinary charge of systematic poisoning has been brought against a woman named Catherine Wilson, or Catherine Taylor. She has been committed for trial. We will give our readers a summary of the evidence brought forward at the trial.]

Storage of Petroleum.—A warm discussion took place at the meeting of the Liverpool Town Council, on Wednesday the 6th instant, upon a recommendation that the standing orders be suspended so as to admit of by-laws being immediately passed for regulating the warehousing and storage of petroleum and other dangerous products.

A memorial was presented from upwards of 1,000 inhabitants of Toxteth-park, complaining of the storage in that vicinity as a nuisance; but a counter representation from a number of firms in the town engaged in the trade was also read, stating that 30,000 barrels of the article had been already stored in Liverpool without accident. Several members present stated that the nuisance from the smell was intolerable and dangerous to health; others that there was no smell, and that Dr. Duncan, the local municipal physician, had declared that the oil was innocuous. Ultimately it was decided to refer the subject to the health committee.

Miscellaneous Jottings.—It has been announced that the tenth session of the Italian Scientific Congress will be opened at Sienna, on the 14th of September. The last session was held in 1847, at Venice.

A fire broke out on Tuesday morning (July 29th) in the Goswell-road distillery and chemical works, the property of Messrs. Medway and Co., situated in Owen's-row. The building in which the fire commenced was about 150 ft. long, and between 30 ft. and 40 ft. wide. The factory contained an immense quantity of spirits, essential oils, and tinctures, all of which are inflammable. The flames were not extinguished until the upper warehouse was burnt out and the roof off; the lower floors were also severely damaged by fire and water. The origin of the fire is not known.

On the 23rd ult. an explosion took place at the patent lucifer-match manufactory of Messrs. Letchford and Co., Camden's-gardens, Three-colt-lane, Bethnal-green, within a few yards of the Mile-end station of the Eastern Counties Railway. Several men were injured, and a portion of the factory was blown down. On the following morning a second and more terrible explosion took place in the ruins, and two men were very seriously injured.

The *Intellectual Observer* for August contains an interesting account of the new metal, Thallium; a notice of Siemen's wonderful furnaces; and many other articles interesting to our scientific readers.

The juries on coroners' inquests in England and Wales found 1,324 verdicts of suicide last year—one in every 329 deaths. 961 of these unhappy persons were men, and 363 were women.



Locust Bean. (G. G., Les Godaines, Guernsey.)—This is the fruit of *Ceratonia siliqua*, a Leguminous plant, growing in the Levant. See "Natural Orders of Plants," in our last volume, page 203.

Disease of the Oak. (E. T. W., Worcester.)—Wishes to know how long the disease, which has attacked the oak, has been noticed in England, and whether it is spreading to the northern counties?

Tilden's Book of Formulæ. (R. and W. Brooke, Halifax.)—This useful work is out of print. It was, until lately, supplied by Morgan Brothers, to the members of the trade at four shillings a copy. We fear that it will not be reprinted until our Transatlantic cousins have got over their frightful difficulties.

Appointment in Ireland. (R. S. M.)—Unless the appointment be a Government one, there is no stipulation for a special qualification.

Salary of Non-resident Druggists' Assistant. (J. T. R.)—This ranges according to circumstances, from about £40 upwards.

Glasgow Druggists' Association.—Will the Secretary kindly favour us with the address of this society?

Cough Mixture.—A Subscriber would feel obliged if any member of the Trade can supply him with a good recipe for cough mixture. One that will keep well, and not containing many expensive ingredients.

Stamp Duty. (W. D. C.)—The label forwarded to us would certainly render the pills liable to duty.

Our February number out of print.—Mr. Henry Thompson, of St. Stephen-street, Norwich, has kindly offered to forward a copy of this number to any Subscriber who will send him stamps for the amount—6d. This is a good chance for some one wishing to complete his set.



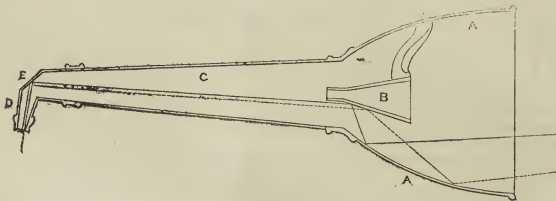
BIRD'S POISON CORKS.

AT page 48 of the present volume we described a cork with an ingenious pentangular top, designed for the purpose of preventing accidental poisoning, the label on the cork appealing to the sense of sight, whilst the angular character of the boxwood top prevented all likelihood of the bottle being mistaken in the dark, or by an illiterate attendant. Mr. Bird has since made a great improvement in the manufacture of these useful corks. The angular top is now formed of a thin piece of metal in place of boxwood,—this has the word **POISON** stamped legibly and indelibly upon it, and possesses the great advantage of being capable of being readily transferred to a new cork if required. Another result, arising from the substitution of stamped metal for boxwood, is, that the cost is so much reduced that the corks can be sold at one-half the price at which they were first offered, and hence are likely to be very generally useful.

MARSHALL'S DOUBLE REFLECTING EAR TRUMPETS.

That instruments, adapted to assist persons labouring under the disadvantage of defective hearing, have hitherto been constructed in an empirical manner, is evident on the most cursory inspection of the variety of shapes in which ear trumpets are made. The fanciful, and, in many cases, absurd forms of these instruments have evidently no reference whatever to the laws of acoustics, but are dictated obviously by the mere whim or caprice of the maker. One evil result of these disadvantageous forms is, that the waves of sound received by the open mouths of these defective instruments are reflected towards the narrow orifice in such a manner that they continually cross and recross in passing up the trumpet; hence they partially neutralize each other, and by their mutual interference produce a confused murmur, closely resembling that heard on applying the ear to a shell.

The ear-trumpets invented by Mr. Marshall, Surgeon to University College Hospital, are designed to obviate these inconveniences. One of these trumpets is shown, in section, in the accompanying diagram, from which it will be seen that they act by means of double reflection.



The atmospheric sound-waves are received into the mouth of an elliptical reflector, A, and are reflected from its inner surface towards a focus, being in this manner powerfully concentrated. Instead, however, of being allowed to reach that focus, and to intersect and interfere with each other there, and again and again in their further course to the ear, so as to occasion loss and confusion of sound; the sonorous undulations thus concentrated are received upon the outer surface of an internal conical reflector, B, which has a peculiar shape so as to accommodate the instrument to slight variations of distance, and from which they are reflected a *second time*, in nearly parallel lines, down the tube C, which conducts them to the ear.

The internal reflector is itself hollowed out to allow the sound to pass along the axis of the instrument; and for convenience' sake, the ear-piece, D, is fixed so as to form an angle of about 100° with the conducting tube C. The concentrated sound is finally reflected into the ear from the surface of a plane mirror, E, adjusted at a proper angle between the conducting tube, C, and the ear-piece, D.

It will be readily understood that by such arrangements, the sound received into the mouth of these ear-trumpets is first concentrated, and then transmitted as evenly as

possible to its destination. It must also be apparent that in accomplishing this purpose every sonorous wave entering the mouth of these instruments is utilized; whereas, even in the best ear-trumpets previously invented, it is easy to show that this cannot be the case; and in regard to some of them, it may be demonstrated that much of the sound must rebound from them altogether.

It is found that in using these new ear-trumpets it is not necessary for the speaker to talk over loudly, nor to force the voice into them with the breath, a consideration of great practical comfort to both the speaker and hearer. Greater or less power is simply obtained by the employment of larger or smaller instruments; and so comfortable and quiet is their action, that many deaf persons, whose ears are unable to bear the shock rendered necessary to make them hear with an ordinary ear-trumpet, are agreeably surprised at the ease and freedom from pain with which they can use these.

The marked superiority of these new instruments, as regards power, distinctness, and comfort, has been at once admitted by every deaf person who has tried them.



THE JURIES BILL AND THE PHARMACEUTICAL SOCIETY.

To the Editor of the Chemist and Druggist.

SIR,—The members of our trade will no doubt properly appreciate the conduct of the Pharmaceutical Society's Council on the Juries Bill. Here is a question affecting the entire trade in its most vital part, not in any way calculated to injure the high qualifications of the learned pharmacuists, nor to raise in public estimation the unlearned chemist and druggist, or make him eligible for those *lucrative* appointments bestowed only upon those enjoying Government confidence through their certificate. The measure might have been a boon to all, without injuring any particular interest; and its introduction afforded "the two divisions of the trade" a glorious opportunity for displaying good feeling and fellowship, and for giving the world a new instance of the strength of union. Open combination between the two divisions was not required, for had the old society remained asleep all would have gone well. But this respectable body on finding that the United Society had seized an opportunity which offered to release druggists from serving on juries, was at once prompted to unusual exertion by envy, hatred, and uncharitableness. Had it not been for its exclusive policy and inexplicable vindictiveness, the whole body of druggists *holding the certificate of the United Society* might now be enjoying the privilege the few have obtained.

The greater number of the pharmacuists will regret the course pursued by their representatives, and must, I am sure, feel greatly indebted to the committee of the United Society; for had it not been for the active vigilance of this society's executive, and the persevering energy of its secretary, their exemption clause would never have

been dreamed of. "The United" had received the Government approval, the acquiescence of the mover of the bill, the support of various honourable members, and all was in a fair way of success, when the "Pharmaceutical" appeared, not aiding in the common cause, but endeavouring to prevent the majority of chemists and druggists receiving any benefit from the bill.

For the present it has succeeded, and no doubt its journal will vaunt its success, as it has done before; but the trade should know that it was not through Government patronage that it gained its cause. The ministry was more in favour of the non-pharmaceuticalist; and it only opposed the whole scheme, because of the quarrelling amongst ourselves.

What benefit has the "Pharmaceutical" gained by thus injuring the trade? Chemists already established, no matter how favourable to the pharmaceutical certificate, can never become possessors of it, although they may desire and encourage younger members of the trade to do so, but must remain to the end of their days opposed to this society, if it insists that all who have not certificates are to be ignored. We can none of us be deceived now as to what we may expect from the leaders of the Pharmaceutical body, when it even costs them nothing to aid us. It is time a new society was empowered to act for the non-pharmaceuticalist, if only to watch the doings of the one established in Bloomsbury-square. I earnestly hope the new society will before next session of parliament cause meetings to be held, and petitions prepared in every important city and town in the kingdom, protesting against this monopoly, and praying for the exemption of all druggists from serving on juries.

I am, sir, yours faithfully,

NORWICH.

TRADE REPORT.

In chemicals there has been rather more business transacted during the month, and in many instances prices have slightly advanced. Sales of Tartaric Acid have been freely made at 1s. 7½d. to 1s. 7¾d., and now 1s. 8d. per lb. is demanded for the best English. A few sales in Oxalic Acid have taken place at 8½d. to 9d., according to quality. Bichromate continues dull at 7½d. to 8d. Yellow Prussiate remains nominal at 1s. A better business has been done in Citric Acid, and the price is firm at 1s. 7¾d. to 1s. 8d. Large sales have been made in Chlorate of Potass at 1s. 0½d. to 1s. 0¾d., and now there are few sellers at 1s. 3d. Several sales have been made in Iodine at 5½d. to 6d., according to quality. English Refined Camphor has been sold at 4s. to 4s. 4d. per lb., and rough has advanced to £17 10s. to £17 15s. Bicarbonate of Soda is more in request; last sales made at 13s. to 13s. 6d. per cwt. Some large parcels of Soda Ash have been taken at 2s. ex ship. More doing in Soda Crystals, and the price is now firm at £4 12s. 6d. per ton, ex ship. Bleaching Powder remains dull at 9s. 6d. to 10s. A few sales in Flour of Brimstone have been made at 14s. for the best, and 13s. 6d. for inferior. More doing in Sulphate of Copper at 31s. 6d. to 32s. Sal Ammonia is steady, firsts at 38s., and seconds at 36s. Sulphate of Ammonia is quiet at 14s. 6d. to 15s. Cream of Tartar is easier, sales made lastly at 125s. Saltpetre is much lower, and market dull at 42s. to 43s. cash for refined f.o.b., according to make. Turpentine has fluctuated between 120s. and 115s. for American, now the price is steady at 115s., and French 110s. to 112s. Sales have been made in crude Petroleum at 13s. to 13s. 6d., and refined 2s. per gallon. Canada Pot and Pearl Ashes are quiet at 36s. to 36s. 6d. A good business has been done in Linseed Oil at 41s. to 41s. 6d. Rape Oil is quieter.

The sales of Drugs have been small this month, but a fair proportion of the goods offered have met with buyers at steady prices. Some parcels of good pale Castor Oil have realized 7d. to 7½d. A large business has been done in Aniseed Oil at 5s. 8d. to 5s. 9d. Small lots Oil Cassia sold at 9s. Bark is steady; sales of yellow made at 4s. 4d. to 4s. 9d. Carthagea 1s. 4d. to 1s. 10d. Cubebs are held for late rates. Nux-Vomica is rather cheaper; sales made at 8s. 6d. to 9s. Gums have sold rather more freely. Olibanum is 2s. to 4s. higher. Dammar and Benjamin are also rather dearer. Some good pale Arabic sold at 42s. and 44s. Turkey Opium has advanced to 21s. and 21s. 6d. for fine. Tonquin Musk sold at 22s. to 25s. Balsam Capivi is sold for 1s. 6d. to 1s. 8d. A large business has been done in Gambier, and the price now is 22s. for good quality. Sales of Cutch had also been made at 27s. 6d. to 28s., being also 1s. to 2s. higher. Turmeric is 6d. to 1s. dearer; last sales of Bengal 18s. 6d. Camphor has advanced to £17 10s. to £17 15s. Shellac sells more readily, and prices are rather dearer. No change in Sarsaparilla. Ipecacuanha has advanced to 8s. 3d. to 8s. 4d., but these prices are now nominal, owing to arrivals.

PRICE CURRENT.

These quotations are the latest for ACTUAL SALES in Mincing Lane. It will be necessary for our retail subscribers to bear in mind that they cannot, as a rule, purchase at the prices quoted, inasmuch as these are the CASH PRICES IN BULK. They will, however, be able to form a tolerably correct idea of what they ought to pay.

	1862.			1861.				1862.			1861.		
	s.	d.	s.	s.	d.	s.		s.	d.	s.	s.	d.	s.
ARGOL, Cape, pret.	9d.	0	100	0	92	6	100	0					
French	59	0	60	0	60	0	85	0		135	0	0	0
Oporto, red	45	0	48	0	60	0	85	0		200	0	0	0
Sicily	70	0	80	0	45	0	0			280	0	300	0
Naples, white	65	0	80	0	65	0	80	0					
Florence, white	90	0	100	0	65	0	80	0					
red	85	0	87	6	85	0	87	6					
Bologna, white	115	0	120	0	115	0	120	0					
ARROWROOT,													
duty 4½ per cwt.													
Bermuda ... per lb.	1	0	..	1	4	0	11	..	1	7			
St. Vincent	0	3	..	0	6	0	23	0	6				
Jamaica	0	23	..	0	32	0	21	0	4				
Other West India.	0	2	..	0	3	0	2	..	0	34			
Brazil	0	14	..	0	2	0	14	0	2				
East India	0	14	..	0	23	0	14	0	23				
Natal	0	23	..	0	73	0	24	0	64				
Sierra Leone	0	24	..	0	3	0	24	0	3				
ASHES ... per cwt.													
Pot, Canada, 1st sort	36	0	..	36	6	35	6	..	0				
Pearl, do. 1st sort.	86	0	..	86	6	36	0	..	0				
BRIMSTONE,													
rough ... per ton	135	0	..	0	0	150	0	..	0				
roll	200	0	0	0	270	0	280	0					
flour	280	0	300	0	290	0	310	0					
CHEMICALS,													
Acid—Acetic, pr lb	0	4	..	0	4½	0	4	..	0	4½			
Citric	1	8	..	0	0	1	9	..	1	9½			
Nitric	0	4	..	0	5	0	3½	0					
Oxalic	0	8½	..	0	9	0	8	0	9				
Sulphuric ...	0	0½	..	0	0	0	0½	0					
Tartaric crystal	1	7½	..	1	8	1	9	..	1	9½			
powdered.	1	8½	..	1	9	1	10	..	0				
Alum ... per ton.	135	0	130	0	120	0	135	0					
powder	145	0	0	0	150	0	0						
Ammonia, Crb. lb.	0	5½	..	0	6	0	5½	0	6				
Sulphate per ton	270	0	200	0	270	0	280	0					
Antimony, ore ...	260	0	280	0	320	0	340	0					
crude, per cwt	24	0	28	0	30	0	32	0					
regulus	44	0	46	0	50	0	50	0					
French star ...	45	0	..	0	51	0	51	0					
Arsenic, lump ...	17	6	..	18	6	17	6	..	18	6			

PRICE CURRENT—continued.

	1862.			1861.				1862.			1861.		
	s.	d.	s. d.	s.	d.	s. d.	DRUGS.	s.	d.	s. d.	s.	d.	s. d.
CHEMICALS.							Cardamoms, inferior	4	6	. 5 6	4	0	. 4 5
Arsenic powder ..	6	6	. 10 0	9	0	. 10 6	Madras..	3	3	. 5 0	3	0	. 4 3
Bleaching Powder.	9	0	. 10 0	9	0	. 10 0	Ceylon..	4	4	. 4 8	3	3	. 4 3
Borax, E. I. refined	52	6	. 00 0	0	0	. 00 0	Cassia Fistula pr ct.	20	0	. 32 0	22	0	. 30 0
British.....	62	6	. 65 0	63	6	. 65 0	Castor Oil, 1st pale, lb.	0	7	. 0 7	0	6	. 0 6
Calomel.....per b.	2	10	. 0 0	2	10	. 0 0	second.....	0	6	. 0 6	0	5	. 0 6
Camphor, refined.	3	2	. 4 4	3	1	. 3 2	infr. & dark	0	5	. 0 5	0	5	. 0 5
Copras, grn. pr. tn.	65	0	. 00 0	65	0	. 00 0	Bombay, incsks.	0	5	. 0 5	0	4	. 0 5
Crsl. Sublimate, lb	1	11	. 2 0	1	11	. 2 0	Castorun ..	1	0	. 26 0	1	0	. 28 0
Green Emuldr. pr. lb	0	9	. 0 11	0	9	. 0 11	China Root, pr ct.	9	0	. 10 0	9	0	. 10 0
Brunswk. cwt.	14	0	. 42 0	14	0	. 42 0	Coculus Indicus ..	14	0	. 00 0	12	0	. 13 0
Iodine, dry, pr. oz.	0	5	. 4 0	0	4	. 3 0	Cod-liver Oil, gal..	4	2	. 6 0	4	9	. 5 0
Magnesia Crbn. ct.	42	6	. 45 0	42	6	. 45 0	Cloynth. apple, lb..	0	7	. 1 0	0	8	. 1 3
Calcined, lb..	1	6	. 0 0	1	6	. 0 0	Colombo Rt. pr ct.	15	0	. 52 6	15	0	. 47 6
Minium red, pr. ct.	29	6	. 23 0	22	6	. 23 0	Cream Tartar, pr ct.						
orange.....	33	0	. 35 0	35	0	. 00 0	French	125	0	. 00 0	120	0	. 00 0
Ptsh. Bichrom. lb.	0	7	. 0 8	0	9	. 0 10	Venetian	127	6	. 00 0	125	0	. 00 0
Chlorate.....	1	1	. 0 0	0	10	. 0 10	grey	112	6	. 120 0	122	6	. 00 0
Hydriodate oz.	0	5	. 4 0	0	5	. 4 0	brown	105	0	. 110 0	115	0	. 117 6
Prussiate ..lb.	1	0	. 1 0	1	1	. 1 2	Croton Seed	50	0	. 70 0	90	0	. 105 0
red.....	2	1	. 2 2	2	2	. 0 0	Cubebbs	130	0	. 135 0	150	0	. 155 0
Predipit. red pr. lb	2	9	. 2 10	2	9	. 2 10	Cumin Seed	48	0	. 55 0	36	0	. 40 0
white.....	2	9	. 2 10	2	10	. 0 0	Dragon's bld. reed.	160	0	. 240 0	140	0	. 280 0
Prussian Blue.....	1	6	. 1 10	1	6	. 1 10	lump.....	70	0	. 200 0	100	0	. 260 0
Rose Pink.....pr ct.	29	0	. 30 0	29	0	. 30 0	Galangal Root	16	0	. 40 0	16	0	. 20 0
Sal-Acetos.....pr lb.	0	10	. 0 11	0	11	. 0 11	Gentian Root	17	0	. 19 0	14	0	. 17 0
Ammoniac, ct.							Guinea Grains,						
British.....	36	0	. 38 0	32	6	. 33 0	per cwt.	48	0	. 50 0	46	0	. 48 0
Epsom.....	8	0	. 8 6	8	3	. 8 6	Honey, Narbonne.	60	0	. 84 0	60	0	. 84 0
Glauber	5	0	. 5 6	5	6	. 0 0	Cuba	24	0	. 36 0	25	0	. 40 0
Soda, Ash, pr deg.	0	2	. 0 0	0	2	. 0 2	Jamaica.....	8	3	. 8 6	6	4	. 0 3
Bicarbonate, ct.	13	0	. 13 6	13	0	. 13 6	Ipecacuanha, pr. lb.	0	10	. 3 10	1	6	. 4 0
Crystals per ton.	0	0	. 92 6	85	0	. 00 0	Isinglass, Brazil...	20	0	. 65 0	20	0	. 65 0
Sgr. Lead, white, ct.	37	0	. 40 0	37	0	. 38 0	East India.....	0	9	. 3 0	1	0	. 3 0
brown.....	27	0	. 28 0	28	0	. 00 0	West India.....	3	0	. 3 0	3	3	. 3 9
Silphte. Quinine oz.	7	9	. 8 0	7	2	. 7 6	Russian	9	6	. 13 0	9	6	. 13 0
British in btl.	7	6	. 0 0	6	9	. 7 0	Jalap	3	0	. 4 10	3	10	. 4 6
Foreign	14	6	. 15 0	14	6	. 15 0	Jaiper Berries, cwt.						
Sulph. Zinc. cwt.	1	3	. 1 5	1	3	. 1 5	German & Frnch	9	0	. 11 0	10	0	. 10 6
Verdigris.....lb.	1	3	. 1 5	1	3	. 1 5	Italian	10	0	. 12 0	9	6	. 12 0
Vermillon, English	2	8	. 3 1	3	0	. 3 4	Limou Juice, pr deg.	0	0	. 0 1	0	1	. 0 1
China	2	3	. 2 4	2	3	. 2 8	Liquorice, per cwt.	83	0	. 90 0	83	0	. 90 0
Vtrl. blue or Roma.							Spanish	85	0	. 95 0	85	0	. 95 0
per cwt.....	32	0	. 33 0	31	6	. 32 0	Italian	2	0	. 2 6	3	3	. 3 9
COCHINEAL, pr. lb.							Manna, flaky	1	6	. 1 9	1	6	. 2 0
Honduras, black..	2	6	. 4 2	2	10	. 4 8	small	20	0	. 30 0	26	0	. 34 6
silver.....	1	5	. 3 4	2	2	. 3 2	Musk.....per oz.	8	0	. 9 0	8	0	. 9 0
Mexican, black....	2	7	. 3 0	2	6	. 3 2	Nux Vomica.....	12	0	. 22 0	17	0	. 18 0
silver	2	5	. 2 6	2	4	. 2 5	Opium, Turkey ..	6	0	. 12 6	6	0	. 13 0
Lima	2	7	. 3 0	2	7	. 3 4	Egyptian.....	27	0	. 30 0	27	0	. 29 6
Teneriffe, black ..	2	6	. 2 10	2	7	. 3 2	Orris Root, pr cwt.	1	10	. 2 2	1	2	. 1 4
silver	2	6	. 2 7	2	7	. 2 8	Pink Root, per lb..	70	0	. 80 0	70	0	. 80 0
DRUGS.							Quassia (bit. w) ton	0	4	. 1 0	0	8	. 0 9
Aloes, Hepatic, ct.	130	0	. 200 0	70	0	. 190 0	Rhatania Root, lb.	0	2	. 2 10	1	4	. 2 7
Socotrine	160	0	. 450 0	110	0	. 450 0	Rhrbr. China, rnd.	1	2	. 3 0	1	2	. 2 9
Cape, good	40	0	. 43 0	40	0	. 42 0	flat	0	9	. 0 0	0	8	. 0 0
inferior.....	20	0	. 36 0	30	0	. 37 0	Dutch, trmd..	3	6	. 4 0	3	3	. 3 6
Barbadoes.....	60	0	. 420 0	40	0	. 460 0	Russian	11	6	. 0 0	11	6	. 0 0
Ambergris, gray.							Saffron, Spanish ..	40	0	. 43 0	47	0	. 50 0
per ct.....	44	0	. 52 0	34	0	. 42 0	Salep ... per cwt.	130	0	. 170 0	250	0	. 280 0
Angelica Root, ct.	20	0	. 35 0	28	0	. 40 0	Sarsaparilla, Lima	0	9	. 1 3	0	10	. 1 2
Aniseed, China, str.	70	0	. 78 0	68	0	. 78 0	Para	0	10	. 1 2	0	10	. 1 2
German, &c.	26	0	. 40 0	26	0	. 40 0	Honduras.....	0	10	. 1 4	0	11	. 1 6
Balsam Canada, lb	1	3	. 1 4	1	3	. 0 0	Jamaica.....	1	5	. 2 3	1	3	. 2 5
Capivi	1	7	. 1 8	1	8	. 1 9	Sassafras. per cwt.	11	0	. 12 0	10	0	. 12 0
Peru.....	5	0	. 5 2	4	7	. 4 9	Scammony. per lb.						
Tolu	4	0	. 4 3	3	9	. 3 10	virgin	28	0	. 36 0	28	0	. 34 0
Bark Cascarilla ct.	25	0	. 40 0	24	0	. 49 0	second	14	0	. 24 0	14	0	. 24 0
Peru crown & grey							Seneka Root	3	0	. 4 0	2	0	. 0 0
per lb.....	1	2	. 2 6	1	6	. 2 6	Senna, Calcutta ..	0	1	. 0 2	0	1	. 0 2
Calisaya, flat....	3	10	. 4 5	3	10	. 4 0	Bombay	0	2	. 0 3	0	2	. 0 3
quill	3	9	. 4 0	3	4	. 3 6	Tinnevely.....	0	3	. 1 6	0	2	. 0 1
Carthagena.....	1	2	. 2 6	0	10	. 2 2	Alexandria	0	3	. 0 6	0	4	. 0 7
Pitayo	1	10	. 2 9	1	6	. 2 3	Snake Root	2	0	. 2 3	1	2	. 1 3
Red	2	6	. 6 0	2	0	. 4 0	Spermaceti, refined	1	0	. 1 2	1	1	. 1 2
Bay Berries, pr ct.	22	0	. 40 0	22	0	. 40 0	Squills	0	1	. 0 0	0	1	. 0 0
Bucca Leaves, lb.	0	3	. 1 3	0	4	. 1 3	Tamarinds, E. Ind.	10	0	. 12 0	9	0	. 12 0
Camomile Flowers	20	0	. 60 0	20	0	. 60 0	W. I. per cwt.	15	0	. 32 0	16	0	. 32 0
Camphor, China ..	355	0	. 0 0	230	0	. 235 0	Valerian Root, Eng	20	0	. 40 0	20	0	. 40 0
Canella Alba.....	19	0	. 40 0	22	0	. 42 0	Terra Japonica—						
Cantharides, pr lb.	2	10	. 8 1	2	4	. 2 5	Gambier, cwt	21	0	. 22 0	15	0	. 16 0
Cardamoms. Mlbar.							Cutch, cwt	27	6	. 28 0	21	6	. 23 0
good.....	6	6	. 6 7	4	6	. 4 7							

PRICE CURRENT—continued.

1862.			1861.			OILS.			s. d. s. d.			s. d. s. d.					
	s.	d.	s.	d.	s.	d.		s.	d.	s.	d.	s.	d.	s.	d.		
DRUGS																	
Vanilla, Mexican lb	25	0	.55	0	30	0	.70	Citronel.....	0	5½	0	6	0	4	0	4½	
Wormseed, pr cwt.	2	0	.. 0	0	5	0	.. 0	Clove	0	4	.. 0	0	0	4	0	0	
GUM per cwt.								Croton	0	3	.. 0	4	0	3	0	4	
Ammoniac, drop..	90	0	120	0	60	0	100	0	Juniper	1	10	.. 4	0	110	.. 4	0	
lump	15	0	.55	0	15	0	.35	0	Lavender	2	6	.. 5	0	2	6	.. 5	0
Animi, fine pale ..	300	0	320	0	290	0	310	0	Lemon	5	0	.. 10	6	5	0	.. 10	6
bold amber ..	200	0	280	0	260	0	270	0	Lemongrass, pr oz	0	5	.. 0	6	0	6	.. 0	7½
medium	170	0	200	0	170	0	230	0	Mace, ex	0	1½	.. 0	2	0	2	.. 0	2½
small & dark ..	100	0	125	0	100	0	160	0	Neroli	6	0	.. 9	0	6	0	.. 9	0
ordinary dark ..	40	0	.80	0	50	0	100	0	Nutmeg	0	1½	.. 0	2½	0	1½	.. 0	2½
Arab. E. I. f. palepkd	50	0	.58	0	48	0	.52	0	Orange per lb.	6	6	.. 7	0	7	0	.. 8	0
unsortd, good to f	32	0	.45	0	36	0	.44	0	Otto Roses, per oz.	14	0	.. 24	0	16	0	.. 25	0
red and mixed ..	20	0	.30	0	18	0	.34	0	Peppermint, pr lb								
siftings	0	0	.. 0	0	18	0	.23	0	American	7	6	.. 13	0	7	6	.. 13	0
Turkey, pkd, gdtto f	105	0	160	0	110	0	150	0	English	33	0	.. 34	0	33	0	.. 38	0
second & infr.	40	0	100	0	42	0	105	0	Rhodium .. per oz.	3	9	.. 6	0	3	9	.. 6	0
in sorts	30	0	.40	0	30	0	.43	0	Rosemary .. per lb.	1	10	.. 3	0	1	10	.. 3	0
Gedda	26	0	.28	0	25	0	.27	0	Sassafras	3	6	.. 4	0	3	6	.. 3	6
Barbary, white ..	32	0	.40	0	30	0	.32	0	Spearmint	5	0	.. 12	6	5	0	.. 12	6
brown	28	0	.30	0	26	0	.27	0	Spike	1	3	.. 1	6	1	3	.. 1	6
Australian	23	0	.25	0	16	0	.18	0	Thyme	1	9	.. 2	6	1	9	.. 2	9
Assafet. fr. to gd.	30	0	110	0	20	0	.95	0	PITCH, Brtsh, prcwt.	8	0	.. 0	0	6	0	.. 6	3
Benjamin, 1st, qual.	400	0	600	0	360	0	630	0	Swedish	10	6	.. 11	0	10	3	.. 0	0
2nd qual	280	0	410	0	160	0	330	0	SALT PETRE, pr cwt.								
3rd	50	0	190	0	60	0	150	0	Engl. 6 p c. or under	37	0	.. 39	6	36	0	.. 36	6
Copal, Angola red.	105	0	120	0	100	0	125	0	over 6 per cent.	38	0	.. 38	0	32	0	.. 35	6
pale	97	0	105	0	85	0	105	0	Madras	35	0	.. 37	0	31	0	.. 35	6
Benguella	110	0	125	0	85	0	110	0	Bombay	35	0	.. 36	0	30	0	.. 33	6
Sierra Laelb	0	10	.. 1	10	0	7	.. 1	6	British-refined ..	42	0	.. 43	0	37	0	.. 38	0
Manilla preb	20	0	.43	0	15	0	.43	0	Nitrate of Soda ..	14	0	.. 14	6	12	0	.. 13	0
Dammar ple. pr ct	42	0	.50	0	45	0	.49	0	SEED, Canary, pr gr.	34	0	.. 50	0	30	0	.. 46	0
Galbanum	100	0	120	0	120	0	160	0	Caraway, kng, p. c.	0	0	.. 0	0	0	0	.. 0	0
Gmbrge, pkd, pipe ..	140	0	180	0	130	0	150	0	German, &c ..	20	0	.. 25	0	0	0	.. 0	0
in sorts	80	0	120	0	80	0	110	0	Coriander	0	0	.. 0	0	0	0	.. 0	0
Gualacum, pr lb ..	7	0	.. 1	6	0	7	.. 1	6	East India	0	0	.. 0	0	0	0	.. 0	0
Kino per cwt.	240	0	280	0	100	0	140	0	Hemp	46	0	.. 50	0	48	0	.. 52	0
Kowrie	24	0	.25	0	16	0	.18	0	Linseed, Black Sea	60	0	.. 63	0	52	0	.. 56	0
Mstic, pkd, pr lb ..	5	0	.. 5	6	7	6	.. 8	6	Calcutta	62	0	.. 66	0	53	0	.. 54	0
Myrrh gd & f pr ct	200	0	245	0	140	0	180	0	Bombay	68	0	.. 70	0	56	6	.. 58	0
in sorts	70	0	150	0	81	0	130	0	Egyptian	58	0	.. 60	0	53	0	.. 54	0
Olibanum, pl. drop ..	65	0	.70	0	54	0	.64	0	Mustard, brn, p. bhl	0	0	.. 0	0	5	0	.. 12	0
ambr & yel.	45	0	.64	0	40	0	.50	0	white	0	0	.. 0	0	5	0	.. 10	0
mixd & dk.	10	0	.30	0	12	0	.23	0	Poppy, E. I. per gr	59	0	.. 60	0	58	0	.. 59	0
Senegal	38	0	.40	0	36	0	.45	0	Rape, English	0	0	.. 0	0	0	0	.. 0	0
Sandrac	75	0	115	0	90	0	105	0	Danube	70	0	.. 71	0	61	0	.. 0	0
Tragacanth, leaf ..	180	0	340	0	190	0	340	0	Calcutta, fine ..	66	0	.. 67	0	56	0	.. 58	0
in sorts	100	0	130	0	100	0	130	0	Bombay	69	0	.. 74	0	65	0	.. 68	0
OILS..... per tun.	£	s.	£	s.	£	s.	£	s.	Teel, Sesame, or any	66	0	.. 69	0	63	0	.. 67	0
Seal	46	0	.46	0	31	0	.36	0	Cotton	160	0	.. 160	0	150	0	.. 0	0
Sperm, body	85	0	.. 0	0	93	0	.. 0	0	Soap, Lnd, per ton	350	0	.. 360	0	320	0	.. 330	0
Cod	42	0	.43	0	35	0	.. 0	0	Gnd, Nnt Kneels, tn	350	0	.. 360	0	320	0	.. 330	0
Whale, Greenland ..	0	0	.. 0	0	0	0	.. 0	0	SOAP, Lnd, yel pr ct.	21	0	.. 36	0	24	0	.. 38	0
Eth Sea pale ..	37	0	.39	0	36	0	.. 0	0	mottled	54	0	.. 36	0	34	0	.. 38	0
E. I. Fish	32	10	.38	0	29	10	.32	0	curd	50	0	.. 0	0	52	0	.. 0	0
Olive, Galipoli, ton.	56	0	.. 0	0	58	0	.. 0	0	Castle	38	0	.. 40	0	37	0	.. 40	0
Florence, i-chst.	1	0	.. 1	2	0	19	.. 0	20	Marsel les	40	0	.. 41	0	40	0	.. 41	6
Coccat, Coch. tn ..	55	6	.57	0	0	0	.44	10	SOY, China, per gal.	2	7	.. 2	8	2	0	.. 2	3
Ceylon	53	6	.55	0	43	0	.44	0	Japan	0	10	.. 1	0	0	8	.. 0	10
Sydney	46	0	.53	0	39	0	.43	0	SPONGE, Turk f. pkd	20	0	.. 24	0	20	0	.. 26	0
Ground Nut & Gin.									dittto, bleacd ..	8	0	.. 18	0	9	0	.. 18	0
Bombay	48	10	.50	0	39	0	.40	0	ordinary	3	0	.. 6	0	3	0	.. 8	0
Madras	50	0	.52	0	40	0	.42	0	Bahama	0	4	.. 1	3	0	3	.. 1	0
Palm, fine	42	0	.45	0	43	0	.. 0	0	TURPENTINE,								
Linseed	41	0	.41	6	32	0	.. 0	0	Rough, pr cwt.	0	0	.. 0	0	16	0	.. 0	0
Raped. Engl. pale	50	0	.. 0	0	42	0	.. 0	0	Spirits, English ..	112	0	.. 0	0	49	0	.. 0	0
brown	48	0	.. 0	0	40	0	.. 0	0	American, fuskels	115	0	.. 0	0	50	0	.. 0	0
Foreign do	51	0	.. 0	0	42	6	.. 0	0	WAX, Bees, English	172	0	.. 175	0	165	0	.. 170	0
brown	48	0	.. 0	0	40	6	.. 0	0	German	170	0	.. 180	0	160	0	.. 165	0
Lard	49	0	.. 0	0	54	0	.. 0	0	American	160	0	.. 170	0	180	0	.. 200	0
Tallow	40	0	.41	0	40	0	.. 0	0	white fine	0	0	.. 0	0	200	2	.. 215	0
Rock Crude	13	0	.. 13	6	0	0	.. 0	0	Jamaica	170	0	.. 180	0	180	0	.. 190	0
Oils, Essential	s.	d.	s.	d.	s.	d.	s.	d.	Gambia	160	0	.. 170	0	180	0	.. 0	0
Almond essen. lb.	19	0	.. 0	0	30	0	.31	0	Mogadore	120	0	.. 160	0	125	0	.. 150	0
expressed	0	0	.. 0	0	1	0	.. 0	0	East India	140	0	.. 170	0	150	0	.. 170	0
Aniseed	5	9	.. 6	0	6	9	.. 7	0	dittto, bleacd ..	160	0	.. 195	0	170	0	.. 220	0
Bay	130	0	140	0	122	6	.. 0	0	vegetable, Japan ..	56	0	.. 84	0	55	0	.. 70	0
Bergamott, pr lb.	6	6	.14	0	6	6	.14	0	WOOD, DYK, per ton,								
Cajeputa, bond, oz.	0	24	.. 0	3	0	1½	.. 0	1½	Fustic, Cuba ..	145	0	.. 150	0	175	0	.. 185	0
Caraway pr lb.	4	3	.. 6	0	4	3	.. 6	0	Jamaica	100	0	.. 0	0	110	0	.. 115	0
Cassia	9	0	.. 9	3	8	9	.. 9	0	Savanna	100	0	.. 0	0	100	0	.. 105	0
Cinamon (Hu) lb, oz.	1	0	.. 3	6	1	6	.. 3	10	Zante	0	0	.. 0	0	140	0	.. 170	0
Cinnamon Leaf	0	2	.. 0	4	0	1	.. 0	2½	Logwood, Cmpchy	180	0	.. 190	0	180	0	.. 190	0



21. M. CARTWRIGHT. *Improvements in the manufacture of models and of plates or pieces for artificial teeth.* Dated Jan. 2, 1862.

This consists in a method of manufacturing models used for preparing "plates" or "pieces" for artificial teeth of vulcanite, ebonite, or hardened rubber, alone or combined with soft vulcanized rubber; also in combining or amalgamating indiarubber and gutta percha with metals for the manufacture of artificial teeth or pieces, and for other purposes. *Patent abandoned.*

147. E. C. NICHOLSON. *Improvements in the preparation of colours suitable for dyeing and printing.* Dated Jan. 20, 1862.

Here the patentee takes red dye, such as is made from aniline or its homologue, and without the admixture of either aniline or its homologue, heats it carefully to a temperature, by preference, between 390° and 420° Fahr. The substance quickly assumes the appearance of a dark semi-solid mass, the red dye being transformed into a dark substance with evolution of ammonia. The mass he prefers afterwards to extract with acetic acid, using a quantity of acid about equal in weight to the amount of red dye treated, and this acid he dilutes with enough alcohol to make a dye of convenient commercial strength. The solution obtained is of a deep violet or purple colour, and may be used directly for dyeing purposes. *Patent completed.*

3195. V. D'ALMEIDA. *An improved mode of obtaining colouring matter applicable for dyeing skins, silk, wool, or other fibrous materials.* (A communication.) Dated Dec. 20, 1861.

This consists in extracting colouring matter from a mollusc known by naturalists as the apysia. The inventor takes several of these animals, and by exerting pressure thereon extracts a liquid colouring matter therefrom, which he places in a vessel, and imparts heat

thereto of about 50 degrees of Fahrenheit. To the colouring matter he adds water, varying in quantity according to the tint or depth of colour required, and varying from lead colour to purple. By these means he obtains colour suitable for dyeing skins, silk, &c., without requiring to use mordants. He also obtains a rich colour resembling that obtained by the use of cochineal, indigo, and carmine. *Patent abandoned.*

3225. F. LAURENT and J. CASTHELAZ. *Improvements in the manufacture of colouring matters.* Dated Dec. 24, 1861.

Here the patentees take nitro-benzine, or nitro-toluine, or other homologue of nitro-benzine, or a mixture of these substances, or a substance containing some or one of them, and by a process of deoxidation they obtain a red colour, varying somewhat in shade, ascending to the method in which the deoxidizing process is conducted, and the extent to which it is carried. The decarbonizing process preferred is to mix with the nitro-benzine or other material, iron-filings and hydrochloric acid. The colouring matter when formed may be purified by dissolving it in water, and precipitating it by saline solutions. *Patent completed.*

3241. P. A. LE COMTE DE FONTAINE MOREAU. *Improvements in treating fatty and resinous bodies, either in a neutral or acid state.* (A communication.) Dated Dec. 27, 1861.

This consists in the treatment of fatty and resinous bodies with intramidine, a substance composed of a mixture of potash, flour, and nitric acid, in preference to any other compound capable of forming nitrous vapours or gases, it having the property of hardening fatty bodies without colouring them too much, and of disinfecting them, and especially of favouring more than any other agent the production of elastic acid. *Patent completed.*

ARTIFICIAL PRODUCTION OF ORGANIC COMPOUNDS FROM BOGHEAD NAPHTHA.—At a recent meeting of the Chemical Society, Mr. Greville Williams, F.R.S., read a paper, in which he stated that he had succeeded in obtaining the iodides of several alcohol radicals from Boghead naphtha. When we consider the almost infinite variety of metamorphoses which these iodides may be made to undergo, it is evident that an almost inexhaustible mine of research has thus been opened. Acids, alcohols, ethers, aldehydes, alkaloids, &c., may now be produced from Boghead naphtha almost to infinity. Mr. Williams has already procured the iodides of amyle, ænanthyle, capryle, and pelargonyle; he has also obtained the new alkaloids ænanthylamine and pelargonamine.—*Intellectual Observer.*

MEDICINAL SUBSTANCES AND PHARMACEUTICAL PRODUCTS SHOWN IN THE INTERNATIONAL EXHIBITION.

WE continue in the present number the publication of a series of complete lists of the various collections of medicinal substances and pharmaceutical products sent from foreign countries and British colonies to the International Exhibition. The lists comprise for the most part the native name, the scientific name, where identified, the popular uses or local reputation, and in some cases the price.

Taraujibin; Manna, (Hedysarum Alhaugi). Kabul. Purgative; 1 rupee 4 annas per seer.

Kamila; Rottleria tinctoria. Hills. Vermifuge; 6 annas 6 pies per seer.

Augur. Dried grapes; Vitis vinifera. Kabul. Tonic.

Opium; from Shahpore. The opium used in the Punjab comes principally from Kulu, in the Himalayas, north of Kangra, but it is also grown in the plains, especially in the district of Shahpore. It is, however, generally grown in the Punjab. A decoction or infusion called "post," is made by steeping the unripe poppy head in water. Shahpore opium sells at Lahore at £1 per pound.

Phatkari; Alum. From Dera Ismail Khan. Alum is manufactured from a black shale found principally at Kalabag on the Indus, where some 430 tons are annually turned out and sold at £7 10s. a ton. The process of its manufacture is almost identical with that employed in European alum works.

Opium. From Kulu.

Anar; Pomegranate. From Jung. The bark of the pomegranate is a powerful astringent, and a solution of it is given for worms. The cooling sherbet prepared from this fruit is particularly grateful in fever.

Sarsaparilla. From Cuttack. Supposed to be a species of Smilax. The local synonymes are, Auanto mool, "Salsa," "Chemreenoe." It is presumed to be the sarsaparilla of the European Pharmacopœia. It abounds in a wild state throughout the district, and very much the same medicinal qualities that are ascribed to sarsaparilla in Europe are applied to this root in India, where it is freely prescribed by native doctors as a diuretic, and in cases of local and general debility.

Cod-liver oil. From Calcutta.

Sochonund Bhyrub. In all kinds of acute fever.

Batal. In remittent fever.

Aunund Bhyrub. In diarrhœa attended with fever.

Kalnagane Russ. In typhus and typhoid fevers.

Jatee Phuladhya Butteeka. In cholera and diarrhœa.

Bujjore Khaur. In indigestion.

Juckreetaree Loho. In chronic inflammation of the liver.

Punchameerto Putpotee. In general anasarca.

Jorasanee Russ. In chronic fevers.

Russa Seendhoor. A preparation of mercury used in all kinds of chronic diseases.

Tumbro Bhusso. A preparation of copper.

Umbul Petanto Russ. In bilious indigestion.

Hingoolessur. In acute fevers.

Chundessur. In remittent fevers.

Ugnee Toondoo. In dyspepsia.

Surpo Bish. Snake poison.

Olhoy Neersung Russ. In hæmorrhagic dysentery.

Camphor. From Calcutta.

Physalis somnifera; Austhoagundah, Calcutta, from the Bazaar. Domestic medicine of the natives.

Cocculus cordifolius; Goluncho. Ditto, ditto.

Anethum Sowa; Soolpo (herbs). Ditto, ditto.

Ditto, ditto; Soolpar Beechee (seeds). Ditto, ditto.

Tylophora asthmatica; Auntoomool. Ditto, ditto.

MEDICINAL DRUGS SOLD IN THE BAZAAR AT CALCUTTA.

- Tribulus lanuginosus*; Gokhun. Calcutta.
- Ptychotis ajowan*. *Conyza anthelmintica*. *Cucumis momordica*. *Anethum Sowa*.
Andrographis paniculata. *Abrus precatorius*. *Cyperus rotundus*. *Acacia stipulata*.
Agathotes Cherayta. *Embllica officinalis*; Agur (white). Ditto (red).
 Ditto (in pieces). Goola unnur.
- Psoralea corylifolia*. Hakooch. Burrojoan. Shoamraj.
- Cassia Sophora*; Kalkashuid.
- Exacum tetragonum*; Koochuri.
- Barleria prionitis*; Gunthajathy.
- Acalypha Indica*; Mooktojoy.
- Cocculus villosus*; Hyeer. Soot Karooah.
- Cyperus pertenuis*; Nagh. Beerbut. Kothoorge.
- Guilandina Bonduc*; Latah fruit.
- Plumbago Zeylanica*; Chitrah.
- Crotolaria retusa*; Bhit jhungun.
- Sulphur**; Amlasa Gundhak. Very pure native crystal of sulphur, used as a stimulant in chronic cutaneous affections; also a laxative to children; applied as an ointment in skin diseases, especially scabies. Dose ʒss. to ʒij.
- Ammonia hydrochloras**; Nissadaul. Used as an alterative, externally in lotions. Dose gr. v. to ʒss. 8 an. per lb.
- Alumen**; Fotekeeree. An astringent. Used both externally and internally: also used in the East as a mordant. Dose gr. x. to ʒss. 3 an. per lb.
- Antimonii ter-sulphuretum**; Russanejun, or Soorma. Used by the native practitioners as an astringent in hæmorrhage; also by native women for painting the tarsus of the eye. Dose gr. v. to gr. x. 8 an. per lb.
- Creta**, or carbonate of lime; Khoree Matee. An antacid; also an astringent in diarrhœa. Dose ʒss. to ʒi. 1 an. per lb.
- Cupri sulphas**; Toonta. As an astringent, both externally and internally. Dose gr. ʒ. to gr. ij. 8 an. per lb.
- Ferri sulphas**; Heerakuss. In spleen as tonic. Dose gr. ʒ. to gr. ij. 2 an. per lb.
- Hydrargyri chloridum eum bichloridum**; Russakarpoor. Impure proto-chloride of mercury. Extensively used as a poison. 2 rupees 12 an. per annum.
- Hydrarg. persulphuret**; Hingool, or Shiengraf. Used externally, and in fumigation.
- White oxide of arsenic**; Suffaid Soombul. Price 4 an. per lb. **White oxide of arsenic**; Semulkhur. 1 rupee per lb. **Yellow sulphuret of arsenic** orpiment; Harital. 10 annas per lb. Ditto; Jorode Sanka. 1 rupee per lb. **Red sulphuret of arsenic**; Realgar. Mansul. Ditto; Darmooj. 1 rupee per lb. The salts of arsenic are brought to the Indian market from China, Sumatra, Java, &c. It enters largely into the composition of the native drugs; and is used to cure leprosy, snake-bite, obstinate intermittent fever, &c. All are extensively employed both medicinally and suicidally as poison.
- Plumbi oxidum semivivum**; Moordar Sunkhur. Much used in ointment for all kinds of sores; also internally as tonic. Dose ʒ to ʒ gr. 6 an. per lb.
- Plumbi carbon impure**; Suffâdâ. In ointment. 4 an. per lb.
- Plumbi oxidum rubum**; Mètè Sindur. In various ointments; imported from China. 3 an. per lb.
- Sodæ carbonas impure**; Sajæ Matre. An antacid and anodyne. Dose ʒss. to ʒjss. 2 an. per lb.
- Sodæ biboras borax**; Sohaga. Extensively used as an astringent, internally and externally. 8 an. per lb.
- Sodæ chloride impure**; Bit Loban. Black salt, much eaten to promote digestion. Dose gr. v. to gr. xx. 2 an. per lb.
- Silicate of potash impure**, or Tabasheer; Bungsholochum. Accumulates within bamboo joints. Is a very common article in the Bengal markets. Used by native practitioners as a powerful tonic and astringent. 1 rupee 8 an. per lb.
- Helleborus niger**; Kalakatki. Roots brought from Nepaul; a powerful cathartic in mercurial and dropsical cases. 8 an. per lb.

- Aconitum napellus*; Katbish, or Metha Zuher. Roots much used as medicine by native practitioners; also extensively as poison. 2 rupees per lb.
- Aconitum* (?); Kalkoot. Another species of aconite, differing from the last by its peculiar smell, extensively used as poison. 2 rupees per lb.
- Aconitum heterophyllum*; Atees. Roots used as tonic and febrifuge; also aphrodisiac. 10 an. per lb.
- Nigella sativa*; Kala Jeera. Seeds used as tonic condiment, and given to nurses to promote the secretion of milk. 12 an. per lb.
- Cocculus palmatus*; Calumbo. Roots imported from Ceylon. An excellent bitter tonic either in powder or infusion.
- Cocculus cordifolius*; Goluncha; the stems, leaves, and roots are bitter, and afford a decoction much used as a tonic in convalescence from fevers and acute diseases generally. Dose ʒij. to ʒss. in decoction. 2 an. per lb.
- Cocculus Indicus*; Kack Maree. Seeds used as one of the ingredients of itch ointment. 3 an. per lb.
- Papaver somniferum* (Sem.); Post Danah. Seeds an article of food; also yield by expression a bland oil, equal to that of the olive employed in European pharmacy. 2 an. per lb.
- Opium*; *Papaver somniferum*; Auding. Immensely cultivated in Patna, Benares, and Malwa districts. (Imported.) Largely used as a sedative and stimulant, both externally and internally, and also for intoxication; and in Bengal for poison. D. se gr. i. to gr. iii. 10 rupees 8 an. per lb.
- Sinapis nigra*; Kalla Surson, or Sarshapa. Seeds much used as a condiment; yield by expression a pungent oil; used both for dietetic and medicinal purposes. Seeds made into a paste, with water, form a sinapism. 2 an. per lb.
- Sinapis alba*; Sada Surson, or Sarshapa. Price and uses same as the last.
- Lepidium sativum*; Haleem. Seeds a gentle stimulant. Dose ʒss. to ʒj. 4 an. per lb.
- Viola banopsha*; Banopsha. This plant comes direct from the hills. Is a stimulant and sordific; also an emetic for children. 8 an. per lb. Dose ʒj. to ʒij.
- Berberis lycium* (ext.); Rosout. Is the watery extract of the roots; the stem and branches are found in all the bazaars, and are much used with effect by the native practitioners as an external application in incipient or chronic ophthalmia. Also a febrifuge. Dose ʒss. diffused in water. 4 an. per lb.
- Chalmoogra*; *Gynocardia odorata*. Seeds imported from Sylhet; yield by expression about 10 per cent. of a thick fixed oil, of unpleasant flavour, and rather offensive smell, used extensively in the treatment of cutaneous diseases; also given internally in lepra tuberculosa. Dose mij. to mʒj. of oil. Price of the oil 2 rupees per lb., of the seed 2 an. per lb.
- Linum usitatissimum*; Tisee, Mosina. Seeds yield an abundance of oil and mucilage, the former being contained in the substance, the latter in the envelope of the seed. Mucilage much used as a demulcent in gonorrhœa. 2 an. per lb.
- Hibiscus* (*Abelmoschus*) *moschatus*; Kala Kustoorce. Seed considered cordial and stomachic. 8 an. per lb.
- Corchorus olitorius*; Lalitapat. The dried leaves are sold in the market. The infusion used as bitter tonic and vermifuge. 3 an. per lb.
- Dipterocarpus laevis*; Gurjun Tel. Essential oil used in the treatment of gonorrhœa, gleet, and similar affections of the urinary organs. Dose mʒ. to mʒx. in mucilage. 8 an. per lb.
- Ægle marmelos*; Bæl. Both ripe and unripe fruit are deemed very astringent, and extensively used in dysentery and diarrhœa. The fresh ripe fruit is very delicious and fragrant. Dose ʒij. to ʒvj. in decoction. 4 an. per lb.
- Hebradendron Gambogioides*; Gamboge. A hydragogue cathartic. Dose gr. iij. to gr. x. 4 an. per lb.
- Garcinia mangostana*; Mangosteen. Rind of fruit imported from Singapore; used with much effect in chronic hæmorrhagic dysentery. Dose ʒj. to ʒij. in infusion. 1 rupee per lb.
- Azadirachta indica*; Nim. This tree is very common. The decoction of the leaves is used for clearing foul ulcers; leaves also employed for making poultices. Bark a most valuable tonic, febrifuge and vermifuge; it can be used as a substitute for cinchona. Dose ʒj. to ʒij. in infusion. 4 an. per lb.

- Oxalis corniculata*; Amrool. Leaves, stalks, and flowers used by the natives as cooling medicines, especially in dysentery. Dose ʒij. to ʒss. fresh juice. 4 an. per lb.
- Pistacia lentiscus*; Mastich. Roomie mastungi. Used as an astringent, internally. Dose gr. ij. to gr. xv. 2 rupees 8 an. per lb.
- Semecarpus Anacardium*; Bhela. The acid juice of the shells of the nuts is given in small doses in leprous and scrofulous affections. 2 an. per lb.
- Commiphora Madagascariensis*; or, Bedellium Googool. A gum resin brought from Arabia. A purifier of blood; also attenuant and pectoral. 6 an. per lb.
- Moringa pterygosperma*; Sugeena. The root of this tree is much like the English horse-radish; when fresh it is used as a stimulant in paralysis and intermittent fever; also a rubefacient in palsy and chronic rheumatism. 8 an. per lb.
- Tragacanth*; Kotilla. This gum forms the basis of some medicinal lozenges and styptic powders. 10 an. per lb.
- Acacia catechu*; Khoyer, Kuth. Much used as an astringent and tonic. Dose gr. v. to gr. xv. 2 an. 6 pies per lb.
- Tamarindus Indicus*; Emli, Tintiree. The pulp is used as a gentle purgative. Infusion forms a cooling drink in fever. 6 pies per lb.
- Cassia Fistula*; Souduloo, Amultas. The pulp is a soft, gentle, and agreeable laxative. 6 an. per lb.
- Cassia elongata*; Sonamookhee. Infusion of senna used as a cathartic. 3 an. per lb.
- Pterocarpus lignum*; Ruckta Chundun. Wood used as a dye stuff; infusion medicinally. 2 an. per lb.
- Kino*; Koomurkus. This gum is rich in tannic and gallic acid, used as an astringent. 4 an. per lb.
- Glycyrrhiza glabra*; Justomodhu. Watery extract demulcent in obstinate cough. 6 an. per lb.
- Psoralea corylifolia*; Bachee, or Babchee. Extract of seeds used to remove leucopathia. 12 an. per lb.
- Mucuna pruriens*; Alkooshee, Keonanch. Hairs which cover the pod used as anthelmintic; when applied to the skin cause intolerable itching. 8 an. per lb.
- Trigonella Fœnumgræcum*; Mithee. Mucilaginous seed used in dysentery.
- Erythrina Indica*; Palata Mundar. Leaves and bark an anthelmintic. Dose ʒij. to ʒj. in decoction. 1 an. 6 pies per lb.
- Æschynomene Sesban*; Jointi Pat. Leaves much used as a poultice to promote absorption. 4 an. per lb.
- Acacia Arabica*; Babul Bark. Bark a powerful astringent. 12 an. per lb.
- Arachis hypogæa*; Cheena Badam. The poorer class of natives eat the roasted nut; it yields an oil, good for every purpose for which olive or almond oil is used. 1 an. per lb.
- Cœsalpinia bonducella*; Kat Kurunjo. Seeds a powerful tonic, and very valuable febrifuge; the kernels are very bitter; reduced to powder, and mixed with black pepper, used with the best results in ague; powdered small with castor oil, applied externally in hydrocele. Dose gr. v. to gr. x. 12 an. per lb.
- Butea frondosa*; Palaspapia. The large flat seeds deprived of their outer covering used as anthelmintic in cases of tapeworm, and also as deobstruent. Dose, gr. iij. to ʒj.
- Cydonia vulgaris*; Beheedana. Seeds a valuable demulcent, tonic, and restorative remedy. 12 an. per lb.
- Trapa bispinosa*; Paniphul, or Singera. Seeds contain a great quantity of fecula, and form an important article of food; much used instead of arrowroot or sago. 4 an. per lb.
- Terminalia Chebula*; Huritakee. Fruit very astringent; with catechu is applied with great advantage in aphthous ulceration. 1 an. per lb.
- Terminalia Chebula*; Huritakee Jangee. The unripe dried fruits used freely as a brisk purge mixed with honey; also in dropsy, diabetes, and hæmorrhoidal affections. Dose ʒi. to ʒij. as purge. 1 an. 6 pies per lb.
- Terminalia bellerica*; Buhera. Fruit astringent and tonic. Dose gr. x. to ʒss. 1 an. 6 pies per lb.

- Citrullus colocynthus*; Indrewan, Makal. Pulp and seeds produce exceedingly powerful cathartic effect; extract of pulp equal to English extract of colocynth. Dose gr. v. to gr. x. 4 an. per lb.
- Cucumis usitatissimus*; Kankoor (seed). The powder of the roasted seeds used as a powerful diuretic, and serviceable in promoting the passage of sand or gravel. Dose gr. v. to gr. xv. 4 an. per lb.
- Tricosanthes Dioica*; Pulbul, or Potole. Root extensively used as a hydragogue cathartic in dropsy. Dose gr. ij. to gr. vj. in powder. 5 an. per lb.
- Ligusticum diffuseum*; Bonjawan. Seeds a carminative. 3 an. per lb.
- Caruum album*; Sha Jeera. Seeds a carminative. 4 an. per lb.
- Narthenx assafetida*; Hing. Powerful carminative and stimulant tonic, used chiefly in hysteria, flatulent colic, chronic catarrh, and spasmodic asthma. Dose gr. v. to gr. xv. 2 rupees 8 an. per lb.
- Ptychotis Ajwan*; Jowani. Seeds an excellent carminative in flatulent colic. 2 an. 6 pies per lb.
- Ptychotis involucreta*; Randoonee. Seeds carminative, also a condiment. 1 an. 6 pies per lb.
- Caruum nigrum*; Jeera. Seeds a carminative. 3 an. per lb.
- Feniculatum Panmorium*; Panmouri. Seeds a stomachic in diseases of children. 3 an. per lb.
- Hydrocoteyle Asiatica*; Thalkoori. The plants grow wild in Bengal; leaves are bitter; toasted and given in infusion to children in bowel complaints and fevers. Also applied as an anti-inflammatory to bruises. On the Malabar coast said to be an excellent remedy in leprosy. Dose ʒi. to ʒij. of fresh juice. 2 an. per lb.
- Rubia Munjista*; Munjeth. Indian madder, given in dysmenorrhœa. Dose ʒj. to ʒjss. in infusion. 2 an. per lb.
- Oldenlandia biflora*; Khitpapa. Extensively cultivated in Bengal. The whole plant in infusion an excellent tonic and febrifuge in chronic fever. Dose ʒj. to ʒij. 8 an. per lb.
- Pœderia fetida*; Gandal. Leaves prescribed as astringent with curries in convalescence from diarrhœa. Roots used as emetic by the Hindoos. 4 an. per lb.
- Nardostachys Jatamansis*; Jatamangshi. A kind of spikenard, imported from Nepal. Refrigerant. Dose gr. v. to ʒj. in infusion. 6 an. per lb.
- Artemisia Indica*; Donna. Leaves much used in scents. Yield a volatile essential oil. 5 an. per lb.
- Conyza anthelmintica*; Sourraz. Seeds very bitter; a powerful anthelmintic. Dose gr. x. to ʒij. 4 an. per lb.
- Anthemis nobilis*; Gool-i-Bhaboona. Infusion of flowers used as stomachic tonic, also an adjunct to purgatives. Dose ʒj. to ʒiv. 4 an. per lb.
- Eupatorium Ayapana*; Ayapan. Juice of the fresh leaves used internally as astringent. Dose ʒij. to ʒiv. 3 an. per lb.
- Anacyelus pyrethrum*; Aukurkora. Indian Pellitory. Roots imported; used internally and externally as a stimulant and sialagogue. Dose ʒj. to ʒj. in infusion. 12 an. per lb.
- Diospyros embryopteris*; Gâb. Fruit yields a juice containing about 60 per cent. of tannic acid; used as astringent and styptic. 4 an. per lb.
- Benzoin*; Loban. Yields about 9 per cent. of benzoic acid; used in incense. 2 rupees per lb.
- Strychnos Nux Vomica*; Kuchla. Very common in the Bengal jungle. The seeds are sold in great abundance in the bazaar; used as a stimulant and tonic, also aphrodisiac, and *poison*. 4 an. per lb.
- Strychnos Nux Vomica*. Fruits preserved in spirit.
- Strychnos Nux Vomica* (Cortex); Kuchla Chaul. Bark also used as *poison*.
- Wrightia antidysenterica*; Radix cortex. Kurchee. Bark of root astringent and febrifuge; also used as a specific in dysentery and bowel complaints. Dose ʒj. to ʒij. in decoction. 8 an. per lb.
- Wrightia antidysenterica seminis*; Indrajab. Very bitter seeds, which are boiled in milk and given in hæmorrhoids and dysentery, and in decoction in fever and gout; also an anthelmintic. Dose gr. v. to ʒj. 5 an. per lb.
- Nerium alba*; Set Karoubee. Bark of root used as a powerful repellent when applied externally; root very poisonous. 5 an. per lb.

- Ichnocarpus frutescens*; Shamalota. Occasionally used as a substitute for sarsaparilla. 12 an. per lb.
- Alstonia scholaris*; Chhatinn. Bark a powerful tonic, much used in bowel complaints; bruised and mixed with water is applied to ulcers, and over rheumatic pains. Bark boiled in oil and mixed with bruised cotton seed is applied to the ears in deafness. 8 an. per lb.
- Calotropis gigantea*; Akund, Mudar. Root, bark, and inspissated juice are powerful alteratives; the natives use the powdered roots in almost all cutaneous affections, especially in syphilitic complaints and leprosy, and in place of ipecacuanha. Dose gr. iv. to gr. viij. 4 an. per lb.
- Hemedesmus Indicus*; Unanto Mool. Very common in Bengal; roots largely used as substitute for sarsaparilla. Dose ʒi. to ʒij. in decoction. 3 an. per lb.
- Agathotes Cheyretta*; Cheyretta. Plant is brought from the Nepal hills; extensively used as a bitter tonic and febrifuge. Dose ʒi. to ʒij. in infusion. 5 an. per lb.
- Sesamum orientale*; Til. Seeds when pressed yield an oil which can be used for all purposes to which olive oil is applied. 1 an. per lb.
- Andrographis paniculata*; Kalmeg. Whole plant used as a stomachic bitter, especially the root, and also in "Droge à mère." Dose ʒss. to ʒj. in infusion. 4 an. per lb.
- Adhatoda vesica*; Bakosh. Flowers, leaves, root, and especially the fruit, considered antispasmodic, and are given in cases of asthma and intermittent fever. Dose ʒj. to ʒiv. fresh juice. 8 an. per lb.
- Vitex trifolia*; Nisinda. Leaves and young shoots considered powerfully discutient; it is simply applied warm in cases of rheumatism, sprains, contusions, &c. 4 an. per lb.
- Ipomea turpetham*; Teoree. The bark of the root used as a hydragogue cathartic. Root being free from a nauseous taste and smell, possesses a decided superiority over jalap, for which it might be substituted. Dose gr. x. to ʒss. 12 an. per lb.
- Pharbitis cerula*; Kaladana. Seeds used as an effectual and safe cathartic. Dose ʒss. to ʒj. 4 an. per lb.
- Shapussundo*. Plant cultivated in Bengal. Powdered seeds an excellent tonic purgative, and very useful in lepra, tuberculosa, &c. Infusion of seeds demulcent; very useful in gonorrhœa. Dose ʒij. to ʒjss. in powder.
- Ocimum basilicum*; Babooi Toolsi. Juice of leaves used in catarrhal affections in children. This shrub is considered sacred. Dose ʒj. to ʒij. warm. 12 an. per lb.
- Datura alba*; Sada Dhatura. Known for the intoxicating and narcotic properties of its fruit. 5 an. per lb.
- Datura fatuosa*; Kala Dhatura. Root used in violent headache and epilepsy. It is a very common practice in India to employ the seeds for stupefying and even poisoning those whom they are at enmity with. 5 an. per lb.
- Hyoscyamus*; Khorasani Ajwain. Seed used as a slight stimulant and carminative. 3 an. per lb.
- Tabacum folia*; Tamak. Very common in Bengal; leaves extensively used for smoking; seldom used for medicine, except when a very powerful sedative is required. 2 an. per lb.
- Solanum Indicum*; Bakoor. Root in infusion as stimulant in cases of fevers and coughs. Juice of leaves boiled with the juice of fresh ginger administered to stop vomiting. Dose ʒi. to ʒij. in infusion. 4 an. per lb.
- Solanum Jacuini*; Kanti Karee. Whole plant used in decoction as expectorant in coughs and consumptive complaints, and humoral asthma. Vinum made from root used to check vomiting. Dose ʒij. to ʒvj. in infusion. 2 an. 6 pies per lb.
- Plumbago Zeylanica*; Chitta. Fresh root made into a paste acts as a vesicatory. Natives procure abortion by introducing the root into the neck of the womb, and keeping it in contact. 4 an. per lb.
- Plantago ispaghula*; Isubgool. Seeds highly mucilaginous; very much used as a demulcent in dysentery. Dose ʒij. to ʒss. in infusion. 3 an. per lb.
- Embelia ribes*; Birunga. Dry berries come from Sylhet; pungent; given in infusion, anthelmintic, heating, and stimulant. Dose gr. v. to ʒj. in powder. 5 an. per lb.

- Rumex tuberosus*; Rheochini. Inferior quality of rhubarb; comes from China; a gentle purgative. Dose 3ss. to ʒj. in powder. 12 an. per lb.
- Achyranthus aspera*; Apang. The flowering spikes, rubbed with a little sugar, made into pills, and given in hydrophobia and cases of snake-bites. Fresh leaves made into a pulp, applied externally to the bites of the scorpion with great effect. Dose gr. v. to gr. xx. 4 an. per lb.
- Laurus camphora*; Kuppoor. Imported from Sumatra and Borneo. Much used as a stimulant both internally and externally. Dose gr. ¼ to gr. viij. 1 rupee 4 an. per lb.
- Croton tiglium*; Jamaulgota, or Joypal. Seeds one of the most drastic purgatives known. Also used as poison. Dose gr. i. to gr. ij. 8 an. per lb.
- Embolica officinalis*; Amla. Seeds given in infusion as cooling remedy in bilious affections and nausea, also in diarrhoea. Dose ʒj. to ʒss. 2 an. per lb.
- Rottlera tinctoria*; Kamila, or Kamala, Gooree. Very common. The mealy powder covering the capsules yields a dye called Kamila dye, which is used as a vermifuge; when given in large doses produces insanity. Dose gr. v. to ʒj. 8 an. per lb.
- Sapium Indicum*; Hoorhoorooya. Fresh juice of this plant used for vesication. 5 an. per lb.
- Acalypha Indica*; Muktajoori. Juice of the fresh leaves an excellent laxative for children. Decoction of root and leaves also a cathartic, and given in earache. Dose ʒj. to ʒss. 5 an. per lb.
- Aristolochia Indica*; Isarmool. Root nauseously bitter; possesses a powerful emmenagogue property; used for procuring abortion; considered to be a valuable antidote to snake-bites, applied both externally and internally. 4 an. 6 pies per lb.
- Piper longum*; Pipool. Powder used as a warm carminative. 5 an. per lb.
- Piper cubeba*; Kababehini. Berries come from Java; employed in gonorrhoea with almost certain success. Dose ʒj. to ʒij. 1 rupee 4 an. per lb.
- Piper chuba*; Choie. A warm aromatic. 8 an. per lb.
- Piper alba*; Sha Morich. A warm aromatic. 4 an. per lb.
- Cannabis Indicus*; Ganjah. The dried hemp plant which has flowered, and from which the resin has not been removed. Used for smoking alone. The alcoholic extract of it is antispasmodic and anodyne; very useful in spasmodic coughs, tetanus, hydrophobia, &c. Dose, extract gr. ¼ to gr. j. 8 an. per lb.
- Pongamia arborea*; *Quercus robur*. Majoo Phull. Au astringent. 8 an. per lb.
- Cyperus longus*; Mootha. Tonic and stimulant. In a fresh state given in infusion as demulcent in fevers, also used in dysentery and diarrhoea. Dose, gr. v. to gr. xv. 8 an. per lb.
- Aloe, Indica*; Ghroto Koomari. Inferior description of aloes obtained from it.
- Areca Catechu*; Sooparee, Gooa. Distributed over India. Considered to be astringent and tonic. 1 an. 6 pies per lb.
- Smilax China*; Chob Chini. Plant wild in China. Root much used as substitute for sarsaparilla. 1 rupee 4 an. per lb.
- Orchidæ radix*; Salep Missree. Imported from Cashmere. Roots eaten as restorative and aphrodisiac. Dose ʒj. to ʒj. 12 an. per lb.
- Andropogon muricatum*; Khus Khus. Infusion of root a gentle stimulant in fever; also when distilled yields uttur, known as Khus-Khus-ka-uthur. ½ an. per lb.
- Zingiber zerumbet*; Buch. Root a stimulant and tonic. 4 an. per lb.
- Amomum Cardamomum*; Borro Elachie. Imported from the Malabar coast. A warm and agreeable aromatic. 8 an. per lb.
- Curcuma Zedoary*; Bone Haldi. A carminative. 4 an. per lb.
- Crocus stigmata*; Zafran (Keysur). Imported from Persia and Cashmere. Aromatic and stimulant. 4 rupees per lb.
- Madras Fish Oil*. Obtained from a fish common on the Madras coast. Largely used in place of cod-liver oil in the Medical College Hospital, Calcutta.
- Lygodium flexuosum*; Bhoot Raj. Powder of leaves a powerful errhine in obstinate headache.
- Momordica dioicea*; Ghosal Phull. The powder or infusion of the fruit, when introduced to the nostrils, produces a powerful errhine effect; also promotes a copious discharge from the mucous membrane of the nostrils. 1 rupee per lb.
- Ruellia litebrosa*; Boore Gopan. Grows wild in Bengal. Fresh juice of leaves mixed with a little honey for curing aphthæ.

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- Mesua ferrea; Nagkashur. An astringent in hæmorrhoidal discharge. Dose of powder ʒj. to ʒj. with butter. 8 an. per lb.
- Bhat-patta, Apta Moola, Khet Mul, Gole Khyroo. These medicines are used by the Mahomedan Hakims.
- Jahur Moora. Kind of steatite; anti-nauseate in cholera. Dose ʒij. to ʒss. 1 rupee 4 an. per lb.
- Mineral waters. From artesian well near Jubbulpore. Impregnated with iron; used by convalescents in fever cases.

ALGERIAN PRODUCTS

Algeria produces a great number of medicinal plants, but at present the most important are the opium poppy, the Pyrethrum, citron bark, and the Scilla maritima, which give rise, especially the latter, to an extensive export commerce. The nature of the climate is extremely favourable to the production of opium, that of Algeria possessing, according to the opinions of scientific men, all the qualities of the best kinds of Smyrna and Indian opium. The Pyrethrum root (*Anthemis Pyrethrum*) is very common in the colony, and is an object of commerce with the natives. It is exported in considerable quantities. Like the other trees of the orange family, the citron increases rapidly in Algeria, and its culture is extending yearly. The roots, the flowers, and the leaves are used medicinally. The Scilla maritima is met with in all parts of the colony.

It is not necessary to speak in detail of the many other medicinal plants which are found in Algeria. The number is very great, some being legitimately employed in pharmacy, others having a factitious reputation, and being used by the native doctors. The value of the vegetable medicinal products exported from Algeria is about £5,000 a-year. The total imports of medicinal plants and their products into France is to the value of £160,000 per annum, exclusive of linseed, part of which is used for extracting oil from, and part medicinally.

The products shown in the Algerian collection are,—

- 197 Lichen, or manna of the desert.
- 198 Kif, hemp smoked by the Arabs.
- 199 *Nigella sativa*.
- 200 Wormwood.
- 201 Indigenous tea of the Aures.
- 202 Pine seeds of Alep, of which the Arabs are very fond.
- 203 Poppy heads.
- 204 Opium poppy heads, *Pimpinella anisum*, *Coriandrum sativum*, senonce of the Arabs (*Nigella sativa*) Fenugrec, *Raphanus sativus*, *Lathyrus ophaca* and cicera, Souchet comestibles, the choufa of the Arabs (*Cyperus esculentus*), opium from the white and other poppies.
- 206 *Nymphaea lutea*, used medicinally.
- 207 Haschish (*Cannabis*).
- 209 Pectoral pâté of dates, astringent syrup of caroubs, alcoholic extract of white poppy.
- 210 *Saponaria officinalis*, *Artemisia vulgaris*, *Gentiana erythraea*, *Coquelicot* (*Papaver rhæas*) Serpolet (*Thymus serpyllum*), *Sanguinaria* (*Paronichia argentea*), Mallow (*Malva sylvestris*), Borage (*Borago officinalis*), Rosemary, Coriander, Liquorice, Thyme, Balm, Mint, *Arundo donax*, Anise, Elder (*Sambucus nigra*), Pomegranate bark, Poppy heads, and extract of poppy.
- 211 Native tea.
- 212, 213, 218, 222 Varieties of capsicum and cayenne.
- 214, 217 Liquorice.
- 220 Indigenous pepper.
- 223 Afra, an oak gall, used medicinally Taselra, indigenous senna, growing spontaneously, a kind of panacea employed with success in numerous maladies.

BRAZILIAN PRODUCTS.

- 93 Dragon's blood, or Brazilian kino (*Croton erythræma*), Purging nut oil (*Jatropha curcas*). Ground nut oil called mandobi. Balsam of Capivi. Motamba bark (*Guazuma ulmifolia*.) This is extremely mucilaginous; powdered and given in syrup it is used in constipation and other disorders. *Angicogrum* (*Pithecollobium gunispiferum*, Mart.) used with syrup, or dissolved in the mouth in catarrhs and other complaints.

94 Ipecacuanha.

95, 96, 97 Collections of chemical preparations.

PHARMACEUTICAL PRODUCTS, DRUGS, &c., FROM THE UNITED STATES.

7 E. Parish for the College of Pharmacy, Philadelphia.

Native roots, drugs, &c., nearly 200 bottles.

Oils.—Linseed, sassafras, sesamum, castor oil, Gaultheria, Mintha viridis, Chenopodium, Monardia, Cod liver, Ceratum Ext. Cantharides.

Liquor gutta percha chloroformis.

Liquor ferra citratis.

Exts.:—Arnica, Colchicum seminum, Colchicum Radix, Valeriana fluidum, Sennæ fluidum, Lupulinæ fluidum, Gentianæ fluidum, Taraxacum fluidum, Senegæ fluidum, Semicifugæ fluidum, Veratrea viridis fluidum, Ergotæ fluidum, Dulcamaræ fluidum, Rhei fluidum, Spigeliæ fluidum, Buchu fluidum, Serpentariæ fluidum, Pruna Virginianæ, Sarsaparillæ, Zinziberis.

Acetum Sanguinæ.

„ Lobeliæ.

Emplastrum Picus Canadensis.

Wild hydrangea root (Hydrangea arborescens).

Cotton root (Gossypium herbaceum).

Green brier root (Smilax sarsaparilla).

Poplar bark (Populus tremuloides).

Sassafras pith.

Philadelphia flea bane (Erigeron Philadelphicum).

Golden seal, yellow root (Hydrastis Canadensis).

Indian physic root, American ipecacuanha (Gillenia stipulacea).

Sweet fern leaves (Comptonia aspleni folium).

Skunk cabbage fruit and root (Dracontium fetidum).

Beech drops plant (Orobanche Virginiana, or Epiphegus Americanus).

Poplar seeds (Populus balsamea).

Wild carrot seed (Daucus carota).

Benne seed (Sesamum orientale).

Sunflower seed (Helianthus annuus).

Prickly ash fruit (Xanthoxylum fraxineum).

Resina podophylli.

Resina jalapæ.

Emplastrum Arnica.

Ferri et ammoniæ tartaras.

Ammonia ferræ alum.

American holly leaves and fruit (Ilex opaca).

St. John's wort herb (Hypericum perforatum).

American sarsaparilla root (Aralia nudicaulis).

Blue cardinal flower herb (Lobelia syphilitica).

Moonseed, yellow Parilla root and leaves (Menispermum Canadensis).

Sweet golden rod herb (Solidago odora).

Fever root herb (Triosteum perfoliatum).

Boneset herb (Eupatorium perfoliatum).

Club of Hercules bark (Xanthoxylum clava Herculis).

Virgin's bower plant (Clematis Virginiana).

Magnolia bark and leaves (Magnolia glauca).

Wormseed herb (Chenopodium anthelminticum).

Tobacco leaves (Nicotiana tabacum).

Black snake root, or cohosh root (Cemicifuga racemosa).

Fever root (Triosteum perfoliatum).

Horsemint herb (Monarda punctata).

Castor oil plant leaves (Ricinus communis).

Witch hazel bark leaves and flower (Hamamelis Virginica).

Indian tobacco herb (Lobelia inflata).

Goatsrue, or catgut root (Tephrosia Virginiana).

Wahoo leaves and fruit (Euonymus atropurpureus).

Climbing staff tree leaves and fruit (Celastrus scandens).

Dandelion root (Leontodon Taraxacum).

Wild cherry bark (Cerasus serotina, or Prunus Virginiana).

Benni leaves (Sesamum orientale).

Frostwort herb (*Helianthemum Canadense*)
 Beth, or Bethwort root (*Trillium pendulum*).
 Pennyroyal herb (*Hideoma pulegioides*).
 Indian physic root, American ipecacuanha (*Gillenia trifoliata*).
 Climbing staff tree bark (*Celastrus scandens*).
 American arbor vitæ leaves (*Thuja occidentalis*).
 Balmoney, or snake head herb (*Chelone glabra*).
 Dittany herb (*Cunila Mariana*).
 American Hellebore rhizome (*Veratrum viride*).
 Spice bush leaves and juices (*Benzoin odoriferum*).
 Spice bush bark (*Benzoin odoriferum*).
 Sweet bush root (*Bituta linta*).
 Sassafras bark (*Sassafras officinalis*).
 Locust bark (*Robinea pseudacacia*).
 Indian hemp root (*Apacynum cannabinum*).
 Eyebright herb (*Euphorbia hypericifolia*).
 Jersey root (*Panax quinquæfolium*).
 Wild yam root (*Dioscorea villosa*).
 Bark of root of butternut, or white walnut (*Juglans cinerea*).
 Blue flag root (*Iris versicolor*).
 Bush honeysuckle herb (*Diervilla Canadensis*).
 Tulip tree bark (*Liriodendron tulipifera*).
 Red cedar tops (*Juniperus Virginiana*).
 White oak bark (*Quercus alba*).
 Seneka snake root (*Polygala Senega*).
 Button bush bark (*Cephalanthus occidentalis*).
 Frost weed herb (*Helianthemum corymbosum*).
 Queen's root (*Stillingia sylvatica*).
 White pond, or sweet-scented lily root (*Nymphaea odorata*).
 Sweet gum bark (*Liquid amber styracifolia*).
 Flesh coloured *Asclepias* plant (*Asclepias incunacete*).
 Canada Fleabane herb (*Erigeron Canadense*).
 Waterhen bark, root, and leaves (*Cicuta maculata*).
 Blue Cohosh root (*Cambophyllum thatectroides*).
 Catnep herb (*Nepaetcataria*).
 Virginia snake root (*Aristolochia serpentaria*).
 Butternut bark (*Juglans cinerea*).
 Cranesbill root (*Genarium maculatum*).
 Redman's snake root (*Aristolochia reticulata*).
 Poke berries (*Phytolacca decandra*).
 May Apple root (*Podophyllum peltatum*).
 Butterfly weed, or Pleurisy root (*Asclepia tuberosa*).
 New Jersey tea root (*Ceanothus Americanus*).
 Blue sculcap, or mad dog weed, herb (*Scutillaria laterifolia*).
 Haircap moss; Robin's eye plant (*Polytrichum Juniperum*).
 Jamestown weed root (*Datura stramonium*).
 Common silk-weed root (*Asclepias Syriaca*).
 Dogwood bark (*Cornus Florida*).
 Poke root (*Phytolacca decandra*).
 Wild potato root (*Convolvulus panduratus*).
 Pipsissiwa leaves, or Prince's pine (*Chimaphilla umbellata*).
 Dogsbane root (*Apocynum arduose unifolium*).
 Slippery elm bark (*Ulmus pulva*).
 Yellow root (*Anthoricza apiifolia*).
 Sweet Cicely root (*Osmonhiza longestylis*).
 Bloodroot (*Sanguinaria Canadensis*).
 Spikenard root (*Aralia racemosa*).
 Poison vine, root, leaves and wood (*Rhus radicaus*).
 Water ash, or wing seed, leaves, and fruit (*Ptelea trifoli ata*).
 Pusunima bark (*Diospyros Virginiana*).
 Wild indigo root (*Baptisia tinctoria*).
 Milfoil yarrow herb (*Achillea millitolia*).
 Life Everlasting herb (*Gaphtalium margaretaceum*).
 Scarlet pimpernel plant (*Anagaillis arvensis*).
 Leaves of Jamestown weed (*Datura stramonium*).
 Squaw vine herb (*Mitchella repens*).
 Spotted Wintergreen leaves (*Chimaphylla maculata*).

Smartweed herb (*Polygarum punctatum*).
 American columba, or gentian root (*Fraseria Walteri*).
 Teaberry, or wintergreen herb (*Gaultheria procumbens*).
 American centaury plant (*Sabbatia angularis*).
 Crow'sfoot plant (*Ranunculus bulbosus*).
 Sumach fruit (*Rhus glabrum*).
 Ragwood leaves (*Ambrosia trifida*).
 Canada snake root (*Asarum Canadense*).
 Mountain Laurel leaves (*Kalmia latifolia*).
 Goldthread root (*Coptis trifolia*).
 Ground Laurel plant (*Epigaea sepens*).
 Liverwort herb (*Hepatica triloba*).
 New Jersey Tea, leaves of (*Ceanothus Americana*).
 Maiden hair herb (*Adiantum pedatum*).
 Blue Cohosh plant (*Caulophyllum Thalictroides*).
 American Senna leaves (*Cassia Marilandica*).

SIAMESE PRODUCTS.

- 39 Nomai, stamens of the flowers of a Dipteraceæ, used in curries.
- 40 Munnack, used as a stomachic.
- 43 Kravan; true Cardamoms.
- 44 Luk Rheu; Bastard Cardamoms. Both species of Cardamoms form not only an article of export, principally to China, but are likewise used for culinary purposes, and as a stomachic. The seeds of the Luk Rheu are of less strength and value than the Kravan. Infusions of its seeds are used in headaches.
- 46 Kamyau. Gum Benjamin (Benzoin), is placed in hot-water, and when cooled used as a drink for inward pains. It is likewise employed in rheumatic pains. A pan having been filled with hot coals, the gum is placed upon it, and the paining limb having been brought as close as endurable, the limb is covered with a blanket in such a manner that none of the vapours arising from the gum can escape. The gum is sometimes mixed with Leeplee (49), and Prickthai (black pepper), to increase its efficacy in rheumatic complaints.
- 47 Ngah-met. Till seed (*Sesamum orientale*, Lin.) The seeds yield a fine bland oil, which is a good substitute for olive oil. It is used in curries, and also burned in lamps, and as a simple employed in ulcerations of the head.
- 48 Luk Makan Liqui. The seeds are burned, or rather roasted, and an infusion made of it, employed as a cooling drink.
- 49 Leeplee, an infusion is used in colds and catarrhs.
- 52 Bungtalai seeds; when immersed in water, they form a large gelatinous mass. This jelly, as I may call it, is sweetened with sugar, and lime-juice having been added to it, it thus forms an agreeable beverage. It is considered abroad as an excellent remedy in diarrhoea and dysentery. Such a reputation it does not bear here; the Matoan, or Bael fruit (*Egle Marmelos*, Corr.), is considered a remedy against dysentery; but the bungtalai is sold in the bazaars for preparing cooling drinks. The Basil seed (*Ocimum*) has the same property of swelling up when immersed in water, and is likewise used in that state amongst the Siamese.
- 53 Zaropi; Pihkoon; used as stomachics.
- 55 Prickhang; infusions, after the seeds have been pounded, are used inwardly against headaches and fevers.
- 56 Bilang Karta; a decoction of the seeds pounded is used against vomiting.
- 57 Prickhom; pounded and placed in cold water the infusion is used against eructations.
- 58 Luk Hang tshikat; an infusion of it is used as a strengthening remedy after childbirth.

WOODS USED MEDICINALLY.

- 64 Rang deng, in conjunction with 67, 68, and 85, against rheumatism and lumbago. The wood having been rasped, a decoction is made, with which, when yet hot, the aching limbs or spots are bathed.
- 67 Tiam leek, or Talumnook, against rheumatism; it is likewise used with Yawkow-yien and Kampengtshet'shan in a decoction against eruptions.
- 71 Plowyai, in conjunction with Plownoi (78), steeped in the common rum of the country, is used in cases of over-fatigue by bathing the limbs and body with the infusion.

- 72 Xaimah thalai; as a lotion against swellings of the joints.
- 73 Nua mai. Eagle or Aquila wood (*Aquilaria Agallochum*), contains a resin which, when burnt, diffuses great fragrance. This resin is only found inside the trunk or heart on its commencing to decay. It is used in infusions against headaches.
- 74 Kritzana, said to be obtained from a tree similar to the Eagle wood. Infusions are likewise used in headaches.
- 75 Samkung; an infusion in brandy or rum, in connexion with Sam Kung noi (80), is given as a strengthening remedy to lying-in women. It is likewise used without Sam Kung noi in menstrual disorders.
- 77 Muakdeng; infusion against eruptions. Used as a lotion, or in a bath.
- 79 Hanglai-phuak, rasped and steeped in orange-water, is employed against sore throats.
- 85 Kow 'one' priam (64.)
- 86 Lodammung; infusion against costiveness.

ANIMAL SUBSTANCES, ETC., USED FOR MEDICINAL PURPOSES, EXPORTED PRINCIPALLY TO CHINA.

- 107A Luet nangret; coagulated blood of the rhinoceros, used as medicine in cases of inward hurts.
- 111 Enn'ana—deer sinews; the hoofs grated are used for the curing of wounds.

JAMAICA.

- 960 Gum Guaiacum, or Lignum Vitæ (*Guaiacum officinale*).
- 961 Concentrated liquor of Eupatorium called Bitter bush, used for diarrhoea and fever; a small teaspoonful being equal to 10 grains of quinine.
- 973 Soap of sulphur, resin, and Barbados tar, for cases of cutaneous disease.
- 989 Liquid cayenne.
- 1013 Chewsticks and powder (*Gouania domingensis*) for the teeth and gums.

AUSTRIA.

In Austria pharmaceutical preparations are made partly in chemical manufactories and partly in laboratories. Recently some apothecaries in Vienna and elsewhere have undertaken the preparation on a large scale of these products, and have secured a large share of custom in the provinces. The manufacture of chemical substances and products and pharmaceutical processes give employment to more than 50,000 workmen; the pecuniary value of the annual production amounts to about 50 million Austrian florins. The import trade reaches 5 million florins, and the export to nearly 8 million florins.

- 85, 86, 98, 102, and 168, are collections of chemical preparations from Prague, Silesia, Vienna, and Trieste.
- 119 Dr. John Lamatsch, of Vienna, shows chemical substances of various kinds, including those admitted into the new Pharmacopœa Austriaca.
- 128 Mr. A. Mott, apothecary, and Messrs. J. Nackt and Son (130), of Vienna, and Messrs. Newbury and Eckstein, of Pilsen, Bohemia, show chemical preparations; Dr. D. Wagner (167), of Pesth, shows Hungarian medicinal plants, including Alkanet root, white Hellebore, soap-root, mustard seed, &c.
- 169 John Zacherl, shows Persian insect powder, from Tiflis, in Asia. It is collected and prepared from the pulverized blossoms of *Pyrethrum roseum Caucasicum*. Extensive stores of it are constantly kept in Tiflis, in original bales and in bottles and packets.

A Collection of Chinese Medicines, Pharmaceutical Products and Drugs from Hankow, &c., by R. A. ROSARIO and H. W. CAREY. The weights are all per pecul of 133½ lbs. the price in taels of 6s. 8d.

- 58 Teen Hoong; a kind of tar, used as a tonic, obtained in Szechune. Price 16 taels per pecul.
- 59 Chen Loong, from Sim Kum; a species of China root, Smilax; diuretic. 5 taels.
- 60 Woon Toong; vermilion; used medicinally. 11 taels.
- 61 Sal Kuht; pearl shells, from Kwantung. Used in ophthalmia. Price 7 to 8 taels.
- 62 Qui Chee; Cassia stalks. Same price as the last.
- 63 Guet Siac. Borax. Used medicinally. 22 taels.
- 64 Si Kok; Rhinoceros horn, from Kwantung. Used as a cooling medicine. Price 58 taels.

- 65 Puk-kee; a tonic medicine. Price 57 taels.
- 66 Moke Toong; a porous wood, from Sim Kum; diuretic. Price 3 to 4 taels.
- 67 Tan Fan; sulphate of iron. Price 36 taels.
- 68 Soo Chin; chromate of potash? Price 3 taels.
- 69 Seac Wong; chromate of arsenic? 14 to 15 taels.
- 70 Soey Fun; whitelead, a cosmetic. Price 10 to 11 taels.
- 71 Chee Men; a root; antiaphrodisiac. Price 6 to 6½ taels.
- 72 Keong Hoo; a root; stomachic. Price 2 to 3 taels.
- 73 Yin Kow; a root; a cooling medicine. Price 11 taels.
- 74 Pakh Sum; a root; for vertigo. Price 16 taels.
- 75 Chune Kiang; ginger; a diaphoretic. Price 10 to 11 taels.
- 77 Sun Ee; tulip tree flower. Price 6 to 7 taels.
- 78 Ming Tong; ginseng, from Tartary. Price 36 taels. It is estimated by the Chinese a cure for all ills.
- 79 Cho Ko; large cardamoms. Used in fever and ague. Price 17 to 18 taels.
- 80 See Chow; small do; a stomachic. Price 5 to 6 taels.
- 81 Puc-mee-chee; a small dried fruit; a stomachic. Price 8 taels.
- 82 Pin Tou; a dolichos bean, also a stomachic. Price 6 to 6½ taels.
- 83 Ming Ting Mah. Used for convulsions in children. Price 30 taels.
- 84 Chune Tuen; diaphoretic. Price 8 taels.
- 86 Loey Yuen; a kind of fungus. Price 18 taels.
- 87 Siac Lin Chee; stone lily seeds. Price 16 taels.
- 88 Yong Kow; India cardamoms husked. Price 11 to 12 taels.
- 90 Choong-koong; a stomachic. Price 20 to 22 taels.
- 91 Loey Lin; a kind of root. Price 170 taels.
- 92 Pac Hoong; sweet almonds. Price 20 to 21 taels.
- 93 Hoey Seac; coral; used for ophthalmia. Price 15 taels.
- 94 Chune Yin, a small seed from Kiang Si. Price 3 taels.
- 95 Hooke Fa; camomile. Price 7 to 8 taels.
- 96 Hoey Mah. The sea horse, hippocampus brevirostrus. Used medicinally. Price 19 taels.
- 97 Tu Foong; an aromatic root from Kiang Si. Price 12 taels.
- 98 Chune Poke; a tonic. Price 56 taels.
- 99 Tai Chuck, a tonic for the lower limbs. Price 20 taels.
- 100 Pack Cheack; a kind of dahlia root.
- 101 Hoo Wing Lin; a bitter root; cooling. Price 44 taels.
- 102 Chune Quut-pee; orange peel. Price 14 taels.
- 103 Moke Pit; a cucurbitaceous seed. Price 5 to 5½ taels.
- 104 Poon Lin; a bitter root, Quassia-like. Price 37 taels.
- 106 Wong Lin; allied to Nos. 101 and 104; cooling. Price 5 taels.
- 107 Koo Chuck; aphrodisiac seed. Price 15 taels.
- 108 Uck Chee; a kind of cardamom; tonic and stimulant. Price 12 taels.
- 109 Pa Kut; tonic and stimulant. Price 14 taels.
- 110 Ko Chee; Myrobalans; astringent; to be sucked for sore throat. Price 7 to 8 taels.
- 111 Yoey Heong; frankincense. Price 13 taels.
- 112 Ee Yin; Chinese barley; decorticated. Price 6 taels.
- 113 Tung Lut; very small seed. Used in asthma. Price 5½ to 6 taels.
- 114 Chut Chock; Dahlia root; cooling. Price 4½ taels.
- 115 Moong Fa flowers. Price 26½ taels.
- 116 Chun Foey; indigo, powdered. Used for scorbutic swellings. Price 12 taels.
- 118 Kung Chee; a small berry used for headache. Price 4½ taels.
- 119 Hep Heong; anti-emetic. Price 9 to 9½ taels.
- 120 Ou Moey; dried plums; astringent. Price 3½ taels.
- 121 Tong Qui; tonic. Price 7½ taels.
- 122 Chune Le; a root; diuretic. Price 7 to 8 taels.
- 123 Hoong Fa; tonic. Price 18 taels.

- 124 Chune Kong; tonic; for upper parts of the body. Price 15 taels.
 126 Soong Heong; yellow resin for plasters. Price 1 to 2 taels.
 127 'Ngow Chee; the seeds of an umbelliferous plant used in small-pox. Price 3 to 3½ taels.
 128 Lin Chin; husks of some small seeds; cooling. Price 3½ to 4 taels.
 129 Hoke Mow; husks of the betel nut (*Areca Catechu*), used in colic. Price 5 to 5½ taels.
 130 Pin Kow, shelled cardamoms. Price 100 taels.
 133 Tahn Sun; a root; tonic. Price 2 to 3 taels.
 134 Chit Leang Pin; a sliced root, much like fuk-leen, from Japan. Used for food and as a tonic. Price 18 taels.
 135 Toong Fa; expectorant and demulce. Price 9 to 10 taels.
 136 Wong Pa. Pine bark; cooling. Price 3 to 4 taels.
 137 Sin Toey. Cicada skins. Febrifuge for children. Price 14 taels.
 138 Tow Loong; demulcent and expectorant. Price 12 taels.
 139 Toong Chow; pith of rice paper plant; diuretic. Price 42 taels.
 140 Goon Hoo; febrifuge. Price 15 taels.
 141 Toong Choong. Elm bark? Aphrodisiac. Price 42 taels.
 142 Tow Kum; for sore throat. Price 8½ taels.
 143 Ma Chune; *Strychnos nux vomica*; poison. Price 7 to 8 taels.
 144 Hoong Hoo; diaphoretic. 11 taels.
 145 Yoke Kum; sedative roots to cure affright. Price 7 to 8 taels.
 146 Wi Yoke; tonic and stomachic for children. Price 18 taels.
 147 Chit Poey; for boils. Price 5 to 6 taels.
 148 Hong Chee; like the Lühraban seeds of Siam; for itch. Price 5 to 6 taels.
 170 Fokein; dried fruit. Used as a cooling medicine. Price 6½ taels.

CHEMICAL AND PHARMACEUTICAL PRODUCTS OF TRINIDAD.

Though the *Materia Medica* of the natives of Trinidad is very copious, specimens of a few articles only have been selected, chiefly because the majority of the medicinal plants are used in their fresh state. In those happy climes of endless summer, every man has his pharmaceutical garden, from which, at need, he takes his supplies. Only a few drugs are kept in the shops, and there is nothing to be met with there like what is found in the Indian bazaars, which are full of medicines of more or less doubtful efficacy.

Quassia. Bitter Ash, E.—*Quinquina Pays*, Fr.—*Quassia amara*, L.

Cedron. Simaba Cedron, L.—*Simarubaceæ*. These two substances contain the vegetable bitter in its greatest intensity. The plant which supplies quassia wood is the one from which the wood of commerce (now derived from another tree) obtained its celebrity. It is used mostly in fevers and disturbances of the digestive and nervous systems. In large doses, it is slightly intoxicating, but leaves no disagreeable symptoms behind. The *Quassia amara* imparts its bitterness to the leaves and stems of parasites which grow on it. Cedron was introduced and first planted in Trinidad by Mr. Purdie. It thrives in sheltered situations, and bears freely, sometimes to such an extent that the trees die of exhaustion. The seeds are of intense and almost unbearable bitterness, and the taste lingers for hours. It is in great repute as an alexipharmic, but its real efficacy is similar to that of quassia. The seeds are an excellent tonic for travellers; even one grain (in weight) imparts an intense bitterness to a half-pint of any liquid.

8. Liane Tasso, Fr.—Bejuco de Cadena, Sp.—*Schmella erecta*, Gri.—*Leguminosæ*. A large Liane, with strangely-twisted stems; the flowers have a delightful perfume. The smaller branches are employed as specifics in diseases of the kidneys, etc.: their action is astringent.

9. Cainca, E.—Grand Brenda, Fr.—*Chiococca racemosa*, Jacq.—*Rubiaceæ*. A demi-creeper, with whitish flowers, and snow-white berries. The root, known as Grand Brenda, was at one time in great repute, and sold for a ducat per ounce. It is reputed diuretic, without having a drastic action. It is useful when the patient cannot take the Liane Tasso, which frequently happens in dropsies and similar disorders. Its old reputation has been lost in Europe, chiefly because the process of drying deprives it of half its virtues. When fresh it has a powerful scent, similar to *Castoreum*.

10. Sequa, Sp.—*Feuillæa cordifolia*, Su. *Cucurbitaceæ*. Sequa, the seed of *Feuillæa cordifolia* and other species, is milder in its bitterness, at least to the taste. It is much

used in disorders of the digestive organs; but in large doses it acts as a drastic. The plant is a fine creeper, affecting the branches of large trees near the water side. The seeds are 10-20, enclosed in a large capsule, of the calabash shape. The oil they contain prevents steel and iron from rusting. See an article in the *Technologist* for August, by Mr. Wilson.

11. Mapourito. *Petiveria alliacea*, L.—*Phytolaccaceae*. The powerful scent of this plant makes it exceptional among the family to which it belongs. It is recommended in cases of fever, and is said to be diuretic and diaphoretic. A small piece of the root is often used to cure the toothache.

12. Manioc Chapelle. *Régisse*, Fr.—*Entada polystachea*. De Cand. *Leguminosae*. The root is prescribed in syphilis, and appears to owe its efficacy to Saponine, a substance which is largely distributed in the vegetable kingdom, but which has hitherto been but slightly known. Grated and mixed with water it makes a lather, and may, consequently, be used for washing, as is the case with another species of *Entada* in the East. The root is also known as *Régisse* (liquorice-root), from its similarity to the *Abrus precatorius*, the West Indian liquorice.

13. Chaw-Stick, E.—*Jiane Saxon*, Fr.—*Bejuco de Rama*, Sp.—*Gouania tomentosa*. Jacq. *Rhamnaceae*. The branches are used for cleaning the teeth, as in other islands those of the *Gouania domingensis*, which belongs to the same family. These, as well as the *Costière* wood, contain Saponine.

14. Carapa Fruit and Seed. Crabtree, E.—*Crapaud*, Fr.—*Carapa*, Sp.—*Carapa guaianensis*, Aubl. *Meliaceae*. The bitter aromatic principle of the *Carapa guaianensis* has not been much used for medicinal purposes, but, like its congeners, it must be a powerful febrifuge. Coolie immigrants, mistaking this tree for the species which grows wild in the East, use it with signal success. The oil of the seed exhibited in another class, is excellent for burning, and otherwise extremely valuable, as it not only destroys insects in wounds (in the case of domestic animals), but also prevents the parent insect depositing its eggs in wounds which are kept anointed with it. The oil partakes of the bitter taste.

15. *Contrayerva*, Sp.—*Dorstenia contrayerva* L.—*Moraceae*. In great repute among the Spaniards as an alexiteric.

16. *Coultarea speciosa*, Aubl. *Quinquina pays*, Fr.—*Rubiaceae*. The bark of this tree, or large shrub, is recommended as efficacious in refractory cases of swamp fever. It acts as a violent emetic and purgative, but it contains no quinine, and cannot therefore be considered a true febrifuge.

17. *Artanthe adunca*, Miq. *Feuille Mal d'Estomac*, Fr.—*Piperaceae*, L. The stimulant qualities of the *Piperaceae* are represented in this plant in an agreeable form. Its leaves have a pleasant smell when dried, of which the tea prepared partakes. It is employed in certain diseases of the stomach, principally weakness and chlorosis; hence its French name. It is also supposed to be a styptic like *Matico*, its near relative, but its reliability in this respect has yet to be proved.

18. *Guazuma ulmifolia*, Lam.—*Bastard Cedar*, E.—*Bois l'Orme*, Fr.—*Guacimo*, Sp.—*Byttneriaceae*, L. The bark of the Bastard Cedar or Guacimo (*Bois l'Orme*, the name given to the fruit), coincides with the general appearance of this tree. When boiled, it yields an enormous quantity of mucilage, which is used externally, as well as internally, in all cases where an infusion of the elm bark, or other mucilaginous drug, is recommended. Cattle are very fond of the fruit, which is sweet and fragrant.

19. Native *Ipecacuanha*. *Asclepias Curassavica*, L.—*Petit Brenda Ipeca*, pays. *Brenda Savane*, Fr.—*Borachera*. *Platanillo*, Sp.—*Asclepiadaceae*. A drastic emetic, often employed when the real *ipecacuanha* is not at hand. The plant is found all over the island, and is, indeed, one of the most disagreeable weeds in pastures, as no animal will touch it, and its seeds, by means of their pappus, spread it rapidly over large tracts of country.

20. *Lignum-Vitæ* Bark, E.—*Guayac*, Fr.—*Guayacan*, Sp.—*Guaiacum officinale*, L. *Zygophyllaceae*. The European practitioners affect the wood; the Trinidadians the bark, which is also one of the principal ingredients of "Mabie," a beverage of common consumption. The bark is more bitter than the wood, and hence it is preferable in a tonic.

21. *Fruta de Burra*, Sp.—The seed vessels of *Xylopia salicifolia*, Kth.—In parts of South America, some species of *Xylopia* serve the same purposes as the one quoted does in Trinidad, viz., that of an aromatic bitter stimulant. When fresh, the fruit is but slightly bitter, but the quality improves in the drying, though at the loss of the aroma.

22. *Costière* Wood, E. *Mawbee Stick*, E.—*Bois Costière*, Fr.—*Colubrina reclinata*.

Rhamnaceæ. A small tree in the Bocos Islands. Its wood enters into the composition of, and serves as the second principle in, the "Mabie." It is agreeably bitter and slightly aromatic, and might be made a substitute for hops. It does not, indeed, as is alleged, induce fermentation, but its tonic qualities are of great value.

23. Amadou, from Black Roseau. Yeskade Cananegra, Sp.—*Bactris major*, Jacq. An excellent article. The Trinidad species of *Bactris*, however, is less prolific than the one found in New Granada, where Amadou (derived from it) is sold in all the markets.

24. Seeds of Stink-weed.—*Herbes puantes*, Fr.—*Cassia occidentalis*, L. A diuretic in cases of dropsy. For many reasons it could never, as has been alleged, be cultivated as a substitute for coffee.

25. Guatamare, Sp.—The pods of *Myospermum frutescens*, Jacq. Leguminosæ.—A very popular stomachic and carminative; a tincture of it is also used externally for pains, &c. It is full of an aromatic principle of peculiar odour and bitter taste. When tapped, the tree exudes a balsam which hardens in the air, and cannot, in that state, be distinguished from Tolu balsam.

26. Castor Oil Seeds. Palma Christi, Fr.—*Higuereta*. Sp.—*Ricinus communis*, L.—Euphorbiaceæ. Castor Oil seed grows in abundance, and thrives in the most unfavourable localities.

27. Grains of Paradise.—*Poivre Guinée*, Fr.—Guinea pepper, E.—The seeds of *Amomum Grana Paradisi*, L.—Zingiberaceæ. Highly aromatic; used as a stimulant in bowel complaints. It is given to game cocks to make them savage.

28. Guaco, Fr. and Sp.—*Aristolochia trilobata*, L.—Equal to the best Guaco imported, and more efficacious than the leaves of *Mikania Guaco*. The flavour of the Trinidad Guaco is similar to that of *Serpentaria* root, but much stronger and slightly disagreeable. Its alimentive qualities may possibly be exaggerated, but when properly administered, it helps the snake-bitten patient over the period of collapse.

29. Hickory Cooperhoop.—*Brownea latifolia*, Jacq.—Leguminosæ. Rosa del Monte, Sp.—Bois corch, Fr. A styptic much affected by women.

30. Gingibrillo, Corozillo de Savana.—*Scleria*, Sp.—Cyperaceæ. Very aromatic; in scent like the *Andropogon* roots, but more pungent, and slightly bitter. Highly esteemed as a stomachic and carminative.

31. Tooth-brush Stick.—*Maba inconstans*, Gris Ebenaceæ.—Bois brosse à dents, Fr. When bruised the wood becomes a bundle of detached fibres, which may be made subservient to the purpose of tooth-cleaning.

PRODUCTS FROM QUEENSLAND.

81. Medicinal barks from *Petastigma quadriloculare*, *Sarcocephalus Australis*, *Croton*, Sp., and *Croton acuminatus*.

82. Apocynaceous Bitter Bark. An erect tree grows in dense scrubs, rich soil, from fifteen to forty-five feet in height, and from two to three inches in diameter; leaves opposite, lanceolate, tomentose beneath. This excessively bitter bark is supposed to contain quinine.

Atello Bark; Rubiaceous. An elegant little tree, common in the scrub. Can give perhaps a useful tonic.

Leichhardt Tree Bark. (*Nauclea Leichhardtii*) A magnificent rubiaceous erect tree, with a handsome globular flower. Grows on the banks of the rivers and creeks. The bark has been used by the settlers located at Rockhampton, and has been proved a useful tonic.

Cascarilla Bark; *Croton*. This tree is very abundant in the scrubs, not of large dimensions; the largest only measuring one foot in diameter. The properties of this bark are well known.

Spice Bark; *Geigeria*. Yields a nankeen dye, and can be used as a spice; when reduced to powder, gives to the palate a refreshing taste.

Cinnamon from *Laurus Cinnamomum*.

Sarsaparilla; *Smilax Sarsaparilla*.

Gums from the grass tree, *Xanthorrhœa hastilis*, and the pine (*Araucaria Cunninghamii*).

Gohanna (Iguana ?) oil. Used by the fishermen for sprains, &c.

Dugong oil procured from the blubber of the *Halicore Dugong*, which is found in great numbers in Moreton Bay, Wide Bay, and other northern harbours. It is exhibited as a new therapeutic agent, and as a substitute for cod-liver oil. The distinction between this and the cod-liver oil is, that it contains no iodine, but it possesses all the advantages of

cod-liver oil without its unpleasant smell. Specimens of the animal have been caught in Moreton Bay weighing from five to six hundred weight; the fat or blubber yielding from five to seven gallons of oil. The lean portion of the flesh of the animal is excellent eating, the aborigines being excessively fond of it, absolutely gorging themselves with the food, when they are so fortunate as to capture one in their fishing expeditions. The skin, which is nearly half an inch thick, can be converted into a gelatine or glue.

Dugong oil is shown in the Ceylon collection by Dr. Croft, of St. John's Wood, who has brought it into use in England. An excellent account of this oil will be found in the *Technologist*, vol. 1.

An oil from an animal of the same family, the *Manatus*, is exhibited in the Brazil Court under the name of Peixe boi.

PRODUCTS FROM VENEZUELA.

33 Cebadilla, the follicular fruits of *Asagroea officinalis*, which contain the alkaloid veratria: used as an emetic and purgative in nausea, and which has also been administered in cases of gout, chronic rheumatism, paralysis, and neuralgia. *Stenanthium frigidum*, Kunth, a native of the cool uplands of Mexico, and called there *Savoaja*, is allied to this, and is also a well-known poison, stupifying the horses that feed upon it. This is one of the sources of the *Sabadilla* seeds of commerce.

37 Simaruba bark.

39 *Secua Escandinava*. Decandolle; antidote against certain poisons, and against rust in steel and iron. This is another species of *Feuillea* seed differing from those shown in Brazil, Trinidad, and Jamaica. In the West Indies they are called antidote cocoons.

40 Curara, an Indian remedy for the cure of hæmorrhage, cuts, wounds, and ulcers.

41 Espiono, used for the same purpose.

42 Indian balsam. Sample bottles of this are ordered to be presented by the exhibitor to different hospitals "that its wonderful efficacy may be tested."

43 Sarsaparilla root.

44 Extract of Sarsaparilla, prepared from the green root by immense pressure, possessing greatly concentrated strength.

45 Pectoral oil from *Agonjoli* seed (*Sesame Orientale*).

47 Bitters from Maracaibo.

48 and 49 *Angostura* bitters, celebrated as a very agreeable tonic, and as most efficacious in removing various disorders.

These bitters enjoy a high reputation in the United States and the West Indies for their delightful aroma and flavour, as also for their efficacy as a stimulant in exciting the appetite.

They possess all the virtues of the *Angostura* bark, (the fresh extract from which forms the basis of these bitters,) and of other medicinal aromatic herbs, for which Venezuela is so celebrated, conducting both to their flavour and efficacy.

They are stated to be an excellent remedy for removing indigestion, flatulency, hysterical and hypochondriac attacks, colic, pains of the stomach, and diarrhoea, arising from weakness and relaxation of the digestive organs. They are likewise invaluable as a preventive of every disposition to Asiatic cholera.

They are principally used thus:—Pour half a tablespoonful into a wineglass, adding wine, rum, or other liquor, and take it before breakfast or dinner, or at any other time of the day, if required. They are also taken in sugared water, or syrup, in which form they have an agreeable taste, and are more suited to ladies and children. When used for children above two years old, the dose should be from twenty to sixty drops, according to the age.

JAPAN.

List of JAPANESE MEDICINES, exhibited in the Great International Exhibition of 1862, sent by Dr. Myburgh:—

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| 1 Hikakoori. Used in gastralgia. | 8 Mawo. Diuretic. |
| 2 Wasseyo. | 9 Hiakooboon. Stimulant. |
| 3 Bo-okon. Diuretic. | 10 Shazenyō. Used in gastralgia. |
| 4 Tookoosin. Stimulant and tonic. | 11 Hakoocho-oko. Used as an external application in albinus |
| 5 Yobaighi. Used in gastralgia. | 12 Akio. Used in gravel. |
| 6 Ayjitsoo. Aperient. | 13 Temokookio. |
| 7 Saykotsio. Febrifuge. | |

- 14 Kanisho-onga. Stimulant.
- 15 Otaneninjin. Stimulant.
- 16 Choray. Diuretic.
- 17 Tayriki. Purgative.
- 18 Həkookiu.
- 19 To-oki. Astringent used in hæmorrhage.
- 20 Kemponasi. Used in small-pox.
- 21 Amai cha.
- 22 Sho-orikoo. Diuretic.
- 23 Go-shioo. Used for stopping coughs.
- 24 Koo-i. Purgative.
- 25 To-ongashi. Diuretic used in dropsy.
- 26 Moka. Diuretic used in dropsy.
- 27 Maikaika. Applied to sores in the mouth.
- 28 Kakong. Used in fever.
- 29 Ninjingio. Stimulant.
- 30 Saykicho-osay. Diuretic.
- 31 Ooyakoo. Used in fever.
- 32 Jiwo. Used in faintness after childbirth.
- 33 Bakoobo. Tonic.
- 34 Goomi. Stimulant.
- 35 Temma.
- 36 Rikio. Used for stopping coughs.
- 37 Tchikoojo. Febrifuge.
- 38 Sammoo. Used as an external application in ringworm.
- 39 Gengoshi. Diuretic.
- 40 Shenkots. Applied to bruises.
- 41 See 14.
- 42 Henno. Stimulant.
- 43 Shimbo-ofoo. Febrifuge.
- 44 Takoosha. Diuretic.
- 45 Mokko. Used in flatulence.
- 46 Sinkiakū.
- 47 Riokoohan. Blister.
- 48 Kaseki. Used in flatulence.
- 49 Maibo. Expectorant.
- 50 Tenkafoon. Expectorant.
- 51 Kfoonrikoo. Burnt and inhaled in extreme cases of venereal disease.
- 52 Hakobe. Used in gastralgia.
- 53 Wamo-oko. Expectorant.
- 54 Takfooto-o. Used for faintness in women.
- 55 Harediana. Diuretic.
- 56 Akaza.
- 57 Rinboso. Used as a tonic for females.
- 58 Giuhenso. Anthelmintic.
- 59 Koobakocsi.
- 60 Ujitsu. Purgative.
- 61 Saruokasé.
- 62 Saysoshii. Anodyne (in wounds).
- 63 Kakukeito.
- 64 Bahots. Used as an application to stop bleeding.
- 65 Shokusitsu. Stimulant.
- 66 Riutanso. Febrifuge.
- 67 Takooran. Astringent.
- 68 O-ongooko. Astringent.
- 69 Mookaka. Anodyne.
- 70 Riboonsi. Stimulant.
- 71 Tchiu. Used for faintness in childbirth.
- 72 Kozuishi. Stimulant.
- 73 Shaoo. Used in inflammation of the throat.
- 74 Kaikinsa.
- 75 Shisa. Astringent and febrifuge.
- 76 Kanterikshi. Antispasmodic.
- 77 Iataighi. Face-wash.
- 78 Nindo. Tonic.
- 79 Gensin or Iiwo. Stimulant.
- 80 Nanteujits. Tonic used after childbirth.
- 81 Sho-oshi or Maatsyani. Applied to sores after being mixed with oil.
- 82 Bochu. Used in difficult menstruation.
- 83 Ninchuhak. Anodyne in toothache.
- 84 So-oodzoo. Stimulant.
- 85 Katay. Emetic.
- 86 Toshishi. Diuretic in dropsy.
- 87 Bakmondo. Tonic.
- 88 Ghikakooshi. Stimulant.
- 89 Botanpi. Tonic after childbirth.
- 90 Akagama. Anthelmintic for children.
- 91 Shikashia. Tonic.
- 92 Saiso. Emetic.
- 93 Ghiakoogo. Tonic.
- 94 Shiso. Refrigerant.
- 95 Riokio. Expectorant.
- 96 Daiwo. Purgative.
- 97 Sanyako. Tonic.
- 98 Chan. Applied to sores after being mixed with oil.
- 99 Mioban. Eye-wash.
- 100 Biakooshi. Tonic.
- 101 Hampi.
- 102 Sambesso. Diuretic.
- 103 Bofoo. Stimulant.
- 104 Shadzenshi. Diuretic.
- 105 To-oghi. Used in coughs.
- 106 Kooshin. Antacid and purgative.
- 107 Goboshi. Used in painful eruptions in children.
- 108 Hakooto-oka. Purgative.
- 109 Dobekko. Used in leprosy.
- 110 Ké-ishi. Refrigerant.
- 111 Pooyo-o, or Goyio. Anodyne.
- 112 Saishin. Expectorant.
- 113 Ko-oka. Refrigerant.
- 114 Biakoojits. Diuretic.
- 115 Koyé. Refrigerant.
- 116 Sorishi. Purgative.
- 117 Hakooghiento. Refrigerant.
- 118 Oreu. Refrigerant and antacid.
- 119 Dokookats. Refrigerant.
- 120 Hakoora. Applied to sores.
- 121 Sanzashi. Used in stomach-ache.
- 122 Riukots. Used in palpitation of the heart.
- 123 Karo-ojits. Expectorant.
- 124 Yunohana. Used in itch.
- 125 Ooyoro. Applied to sores and bruises.
- 126 Iwo. Used in itch.
- 127 Goshiyu. Antacid.
- 128 O bakkoo. Refrigerant; also used as an eye-wash.
- 129 Shookoosha. Stimulant.
- 130 Kinsenjuro. Anthelmintic.
- 131 So-ojitsu. Diuretic.
- 132 Soshi. Expectorant.
- 133 Seukin. Anodyne in headache.
- 134 Karonin. Expectorant.
- 135 Biakoongaishi. Stimulant.

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| 136 Oro. Applied to sores. | 167 Mokoobooshi. Stimulant. |
| 137 Bashoyo. Diuretic. | 168 Ke-ingai. Used in gonorrhœal rheumatism. |
| 138 So-okisho. Anodyne in gastralgia. | 169 Kikokoo. Antacid. |
| 139 Hingenjin. Tonic. | 170 Oyakshi. |
| 140 Shinkoong. Tonic. | 171 So-ojitsu. Tonic. |
| 141 Sanshisi. Antacid. | 172 Kioning. Expectorant. |
| 142 Karakon. Expectorant. | 173 Jikopi. Refrigerant. |
| 143 Idzui. Stimulant. | 174 Shakuyakoo. Stimulant. |
| 144 Sho-oma. Refrigerant. | 175 Taiso. Tonic. |
| 145 Yokoo-inin. Tonic after childbirth. | 176 Hakto-ozoo. Tonic. |
| 146 Chikoo-setsoo. Antacid. | 177 Sekidiughi. Applied to sores in the mouth. |
| 147 O-ongong. Astringent in diarrhœa. | 178 Sekisho-okon. Diuretic. |
| 148 Sentai. | 179 Inchin. Used in jaundice. |
| 149 Gokashi. Refrigerant. | 180 Bo-i. Diuretic. |
| 150 Kijitsu. Antacid. | 181 Tsooso. Emetic. |
| 151 Hangay. To stop vomiting. | 182 Jenko. Refrigerant. |
| 152 Mangotaro-mooshi. Anthelmintic. | 183 Saiko. Refrigerant. |
| 153 Kiokats. | 184 Kiokats. Antacid. |
| 154 Sansho-ongio. Anthelmintic. | 185 Lenikoo. Tonic. |
| 155 Kaininso. Anthelmintic. | 186 Oobai. Anthelmintic. |
| 156 Emmeghi. Antacid. | 187 Kipi. Refrigerant. |
| 157 Hosenkash. Applied as poultice, and supposed to draw out thorns, &c. | 188 Chotoko. Diuretic. |
| 158 Chimo. Tonic. | 189 Gajits. Antacid. |
| 159 Toning. Used in difficult menstruation. | 190 Enkona. Used in colic. |
| 160 Sampento. Diuretic. | 191 Kakka. Tonic. |
| 161 Goto. Applied externally in swelling of the joints; also used internally. | 192 Gomishi. Used in coughs. |
| 162 Koyeka. Diuretic. | 193 Booshi. Stimulant. |
| 163 Motsuro. Antacid. | 194 Hakka. Anodyne. |
| 164 Ko-obooshi. Stimulant. | 195 Shokusho. Stimulant. |
| 165 J.-to-oshi. Used in difficult menstruation. | 196 Tennansé. Expectorant. |
| 166 Sho-ookio. Antacid. | 197 Shifooshi. Diuretic. |
| | 198 Temmondo. Tonic. |

And a quantity of Moxa.

List of JAPANESE SURGICAL INSTRUMENTS (made principally after European models,) exhibited in the Great International Exhibition of 1862.

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| 1 Trocar. | 28 Tortoiseshell probe. |
| 2 Clyster-pipe. | 29 Turning fork. |
| 3 One silver catheter; one tortoiseshell do. | 30 Catheter. |
| 4 Grove director. | 31 Forceps. |
| 5 Lancet. | 32 Curved scissors. |
| 6 Lancet. | 33 Two plates for spreading plasters, &c. |
| 7 Potential cautery. | 34 Instrument for extracting bullets. |
| 8 Spatula. | 35 Two actual cauteries. |
| 9 Whalebone do. | 36 Midwifery forceps. |
| 10 Three instruments for cleaning and lancing teeth. | 37 Do. do. |
| 11 Bullet forceps. | 38 Do. hook. |
| 12 Scissors for the nose. | 39 Large lancet. |
| 13 Scissors. | 40 Scissors. |
| 14 Fistula knife. | 41 Knife. |
| 15 Lancet. | 42 Tooth forceps. |
| 16 Curved scissors. | 43 Spatula. |
| 17 Syringe. | 44 Curved forceps. |
| 18 Bone forceps. | 45 Three lancets. |
| 19 Tourniquet. | 46 Tooth file. |
| 20 Small scissors. | 47 Lancet. |
| 21 Forceps. | 48 Curved scissors. |
| 22 Spreading spatula. | 49 Forceps. |
| 23 Forceps. | 50 Lancet. |
| 24 Three needles. | 51 Vaccinating lancet. |
| 25 Blunt-pointed scissors. | 52 Saw. |
| 26 Bone pliers. | 53 Twenty-five silver acupuncture needles. |
| 27 Hernia truss. | |

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